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I. GENERAL CHARACTERISTICS

1. **Method of functioning.** — The weapon is gas-operated. Gas intake is controlled by means of a regulator, which ensures regular and smooth functioning, without excessive recoil. The breech block is mechanically locked before firing can take place; in addition, unlocking cannot take place until the bullet has left the barrel.

As the breech block must necessarily be in the forward position when firing takes place, accuracy is not affected by the forward movement of a fairly heavy mass, which is one of the draw-backs of many automatic weapons.

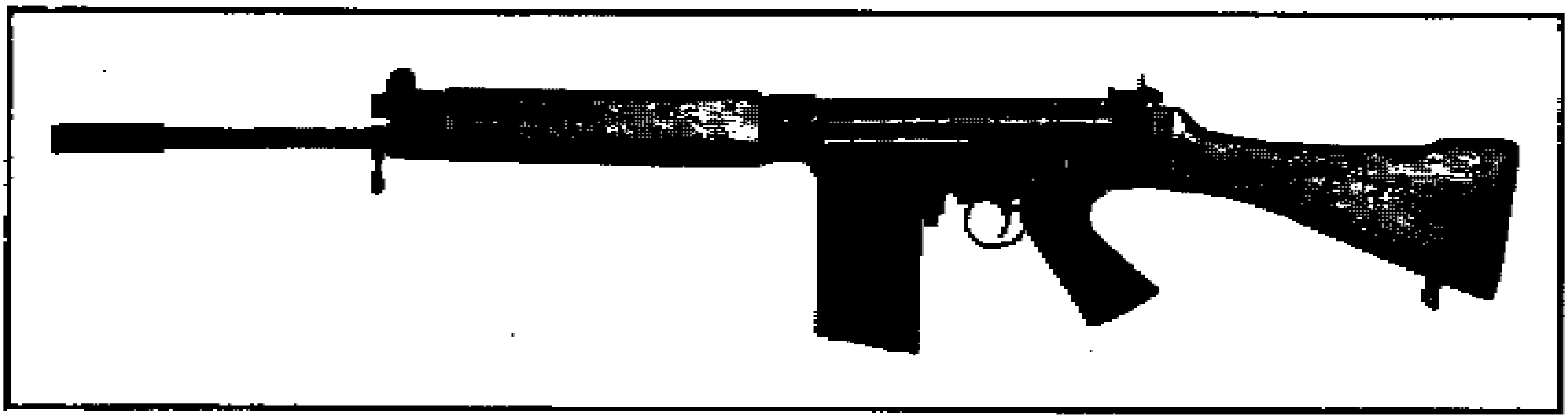


Fig. 1

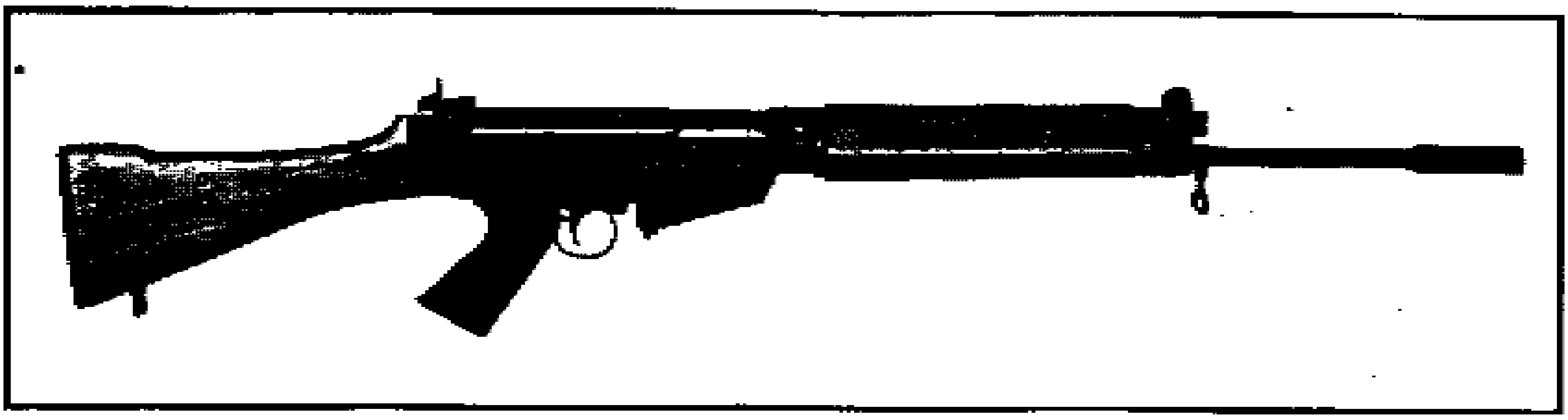


Fig. 2

After each shot, the mechanism extracts the spent case and feeds another round into the chamber; this operation continues so long as there are any cartridges in the magazine. When the magazine is empty, the breech block is held to the rear, which lets the firer know that he must recharge.

2. **Firing.** — The rifle can be fired in two ways, either semi or full automatic, by manipulating the change lever positioned on the lefthand side of the trigger frame.

3. **Stability.** — By placing the gas cylinder above the barrel and careful attention to design, the centre of gravity of the weapon has been placed in line with the barrel axis. The tendency of a weapon to jerk upwards on recoil has thus been eliminated in this rifle, as compared with most existing types. This stability enables the firer to keep his sights trained on the target without difficulty. On the other hand, this design avoids the danger inherent in rectilinear weapons, with raised sights, which force the soldier taking cover to disclose his position when he fires.

4. **Method of feed.** — Feed is from a 20-round magazine, housed beneath the receiver. Arrangement of cartridges in the magazine is quincuncial.

5. **Sights.** — These consist of:

— An aperture backsight, graduated up to 600 metres (or yards), fixed to the rear part of the trigger frame,

— A well protected foresight, mounted at the forward end of the gas cylinder.

The line of sight is very low, which allows the soldier to keep under cover when firing.

6. **Gas regulator.** — This is designed on the exhaust principle, i.e. the regulator only allows sufficient gas to ensure correct functioning to penetrate into the gas cylinder; surplus gas is vented outside the weapon. This system prevents undue wear on the mechanism and keeps fouling to a minimum.

7. **Protection from the elements.** — The weapon itself is completely weatherproof, without any additional protection, and this is the best safeguard against grit, sand and mud.

8. **Handiness.** — The reduced weight of this rifle and its length make it a very handy weapon. Its weight is in proportion to the power of the cartridge and it is thus a very comfortable weapon to fire. The F. N. 7.62 mm rifle is designed so that the operations of cocking, feed, putting the weapon at safe are done with the left hand, leaving the right hand on the pistol grip. In addition, the rifle has a carrying handle, which can be folded down when not in use. This handle is positioned at the centre of gravity and is a handy method of carying the weapon when advancing in the field.

9. **Stripping and assembly.** — Stripping and assembly for normal cleaning and maintenance can be done without using tools. For the usual cleaning, it is sufficient to take out the magazine, gas plug and piston and the breech block assembly, after removing the top cover (fig. 3). The breech block assembly and the cover can be removed very easily. The weapon opens like a shot-gun, i.e. the butt is hinged to the body and the rifle swings open to give access to the mechanism. The return springs, encased in the butt, do not require maintenance and should never be touched by the user.

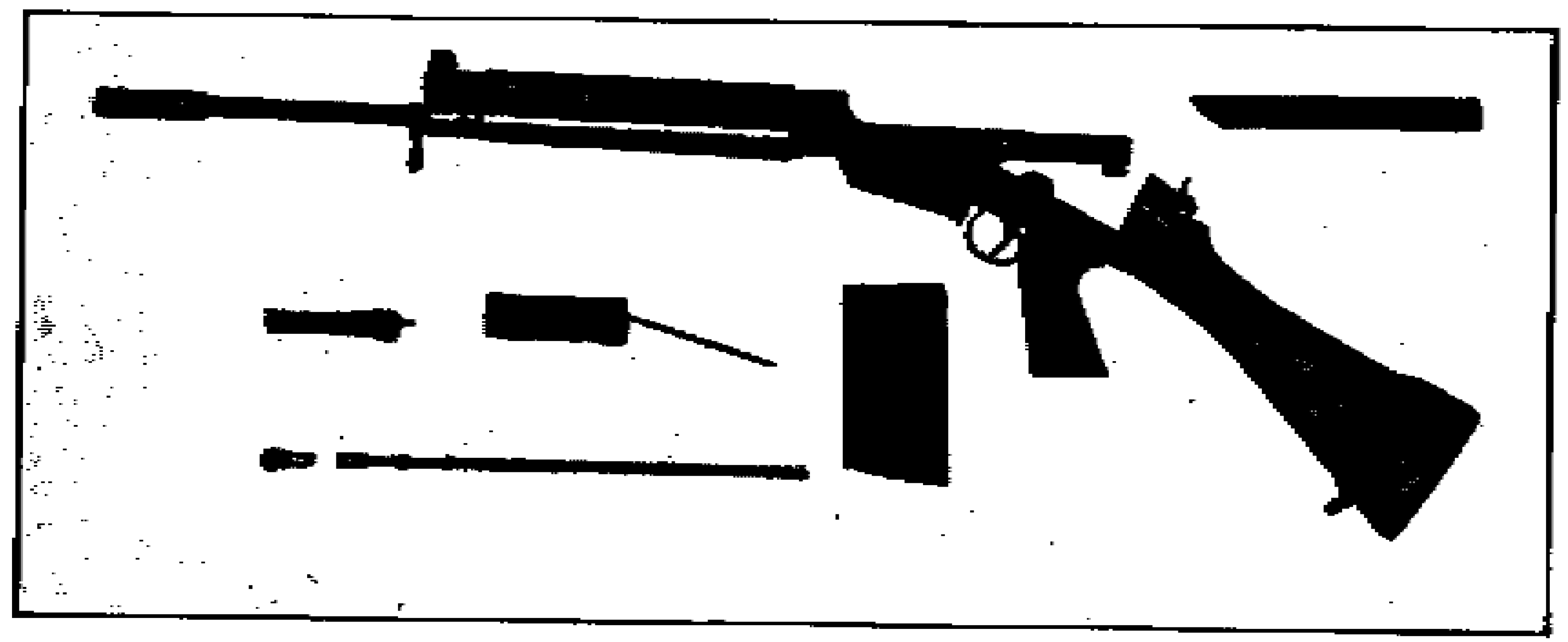


Fig. 3

10. Technical details

1. Weights:
   a) Rifle without magazine: 4.200 kg (9.25 lbs.);
   b) Empty magazine: 250 grams (8.8 ozs.);
   c) Filled magazine: 730 grams (1 lb. 9.74 ozs.) (bullet 9.30 grams = approx. 144 grains);
   d) Barrel: approx. 800 grams (1 lb. 12.21 ozs.);
   e) Bayonet with scabbard: 350 grams (12.34 ozs.).
2. Lengths:
   a) Overall length: 1.10 metres (43.3");
   b) Barrel: 533 mm (approx. 21");
   c) Bayonet: 290 mm (approx. 11.4").
3. System of operation: gas.
4. Method of feed: 20-round magazine.
5. Position of feed opening: underneath the body.
6. Position of ejection opening: right side of body.
7. Position of cocking handle: left side of body.
8. Position of change lever: left side of trigger frame.
9. Sight radius: 553 mm (21.77").
10. Backsight graduated from 200 to 600 metres, in 100 metre steps (or in yards).
11. Rifling of barrel: number of grooves: four; twist: righthand; pitch: 1 in 305 mm (1 in 11.9").
12. Rate of fire:
    a) Cyclic: 650-700 r.p.m
    b) Effective, automatic fire: 120 r.p.m.;
    c) Effective, semi-automatic: 60 r.p.m.

II. OPERATION OF MECHANISM

1. GAS SYSTEM

— Starting point:
a round is in the chamber;
the breech block is locked;
the shot has just been fired.

— The bullet moves along the barrel and reaches the level of the gas port (**f**) (fig. 4).

— The combustion gases pass through the gas port (**f**) and reach the gas plug (**a**), which closes the front end of the gas cylinder, screwed into the gas block (**b**); if the gas plug is closed (letters Gr showing on top), the gas intake is blocked and the weapon will then function as a repeating rifle.

— If the gas plug is open (letter A showing on top), gas passes through the plug (**a**) and reaches the piston head (**d**).

— Under pressure of the combustion gases, the piston moves backward and uncovers the gas outlet vent (**e**).

— The gas exhaust vent is partially closed by the gas regulator (**c**) the position of which determines the gas exhaust and thus controls the quantity of gas acting on the piston. The position of the gas regulator sleeve is normally determined when the weapon is fired for gas regulator setting (see Chapter IV).

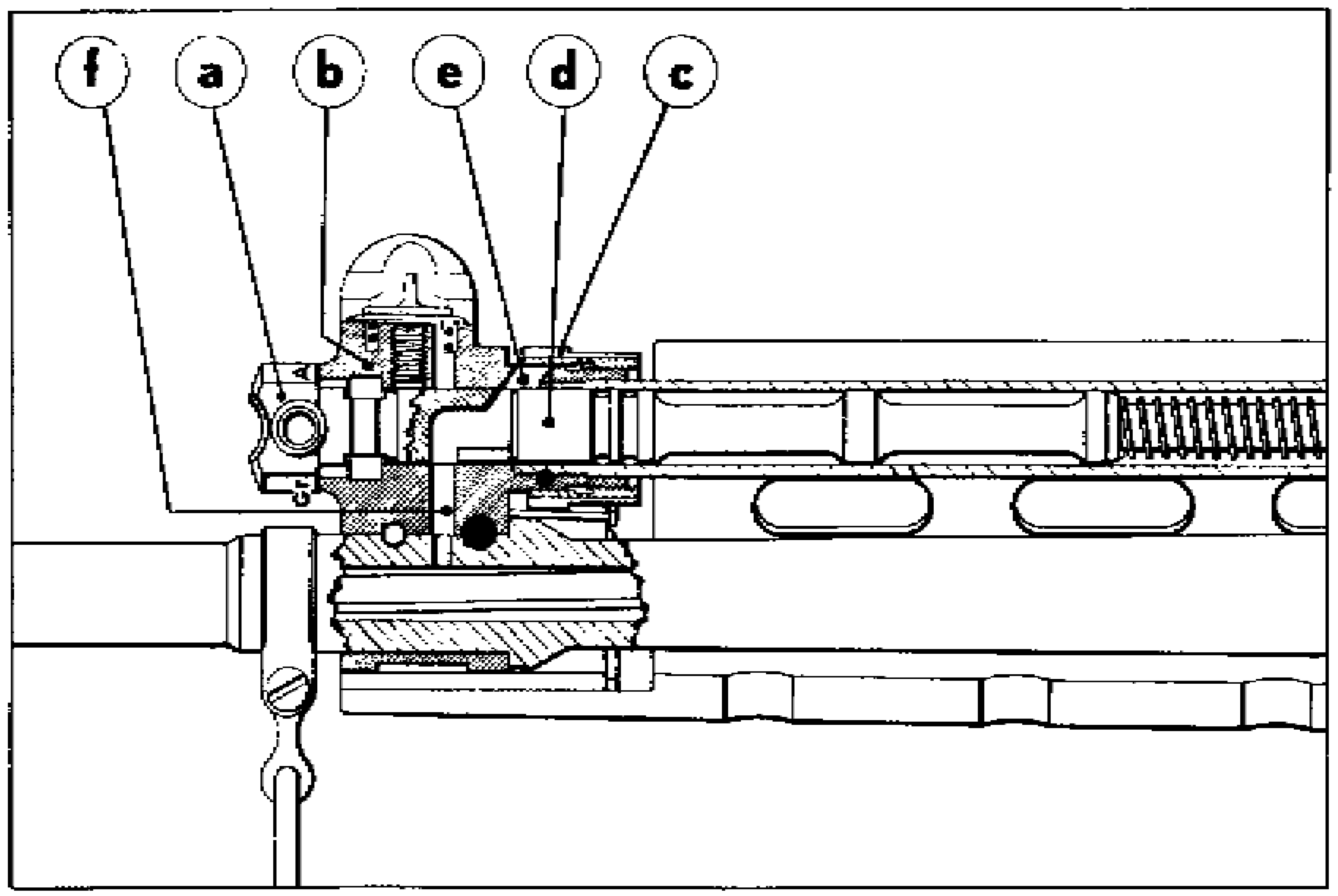


Fig. 4

— As the piston (P) moves backwards, it contacts the slide (B) (fig. 5), thrusting it to the rear.

— The piston spring, which has been compressed by the rear movement of the piston, relaxes and returns the piston to its forward position.

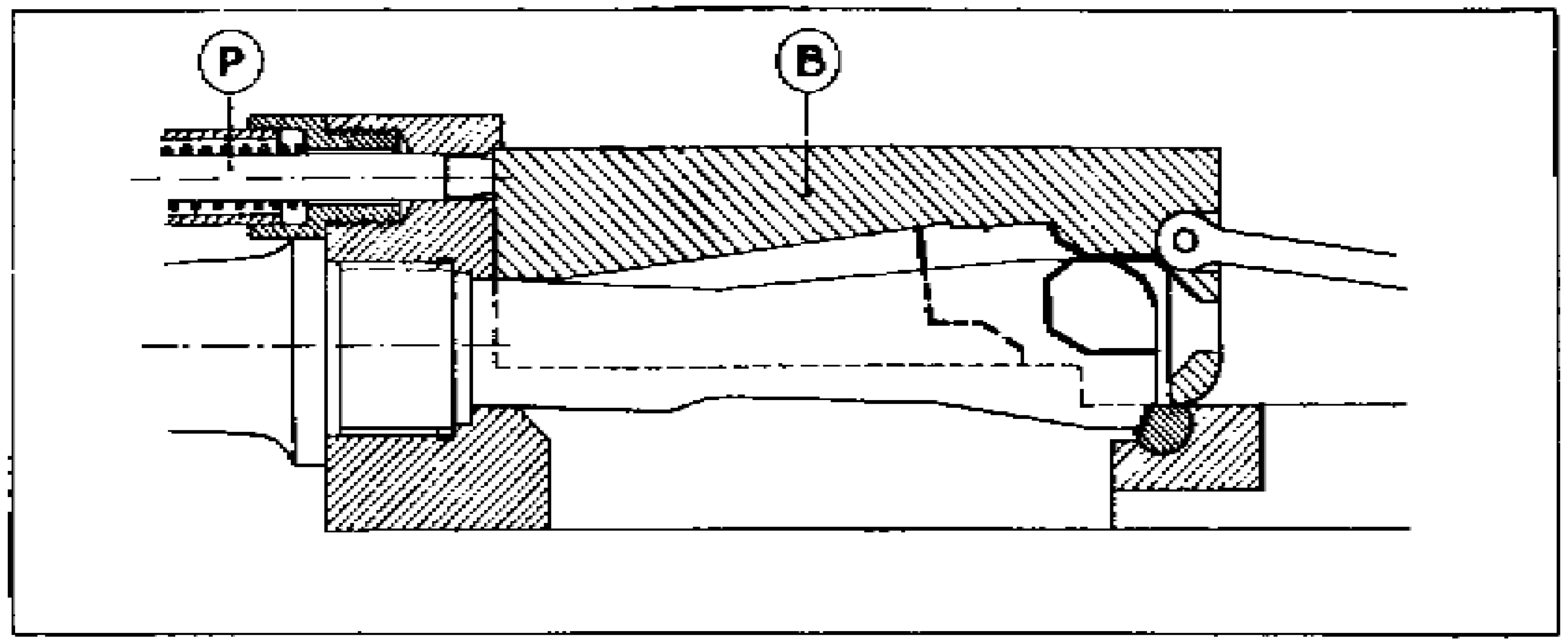


Fig. 5

2. REAR MOVEMENT OF THE MECHANISM

a. **Unlocking the breech**

— As the slide moves backwards, the ramps of the slide (B1) engage the cams of the breech block (C1) (fig. 6), raising the rear end of the breech block and lifting it out of engagement with its locking shoulder (D) in the body (E) (fig. 7).

— The breech block is thus unlocked.

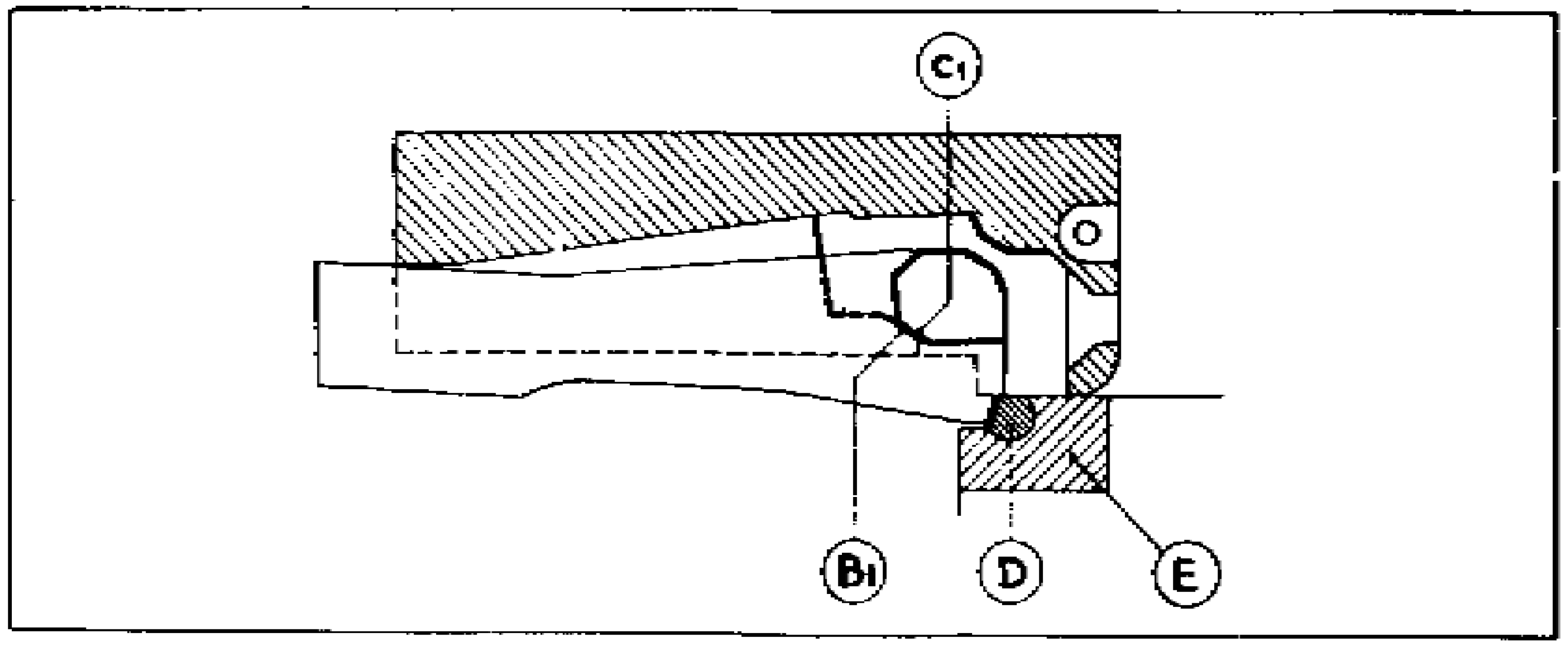


Fig. 6

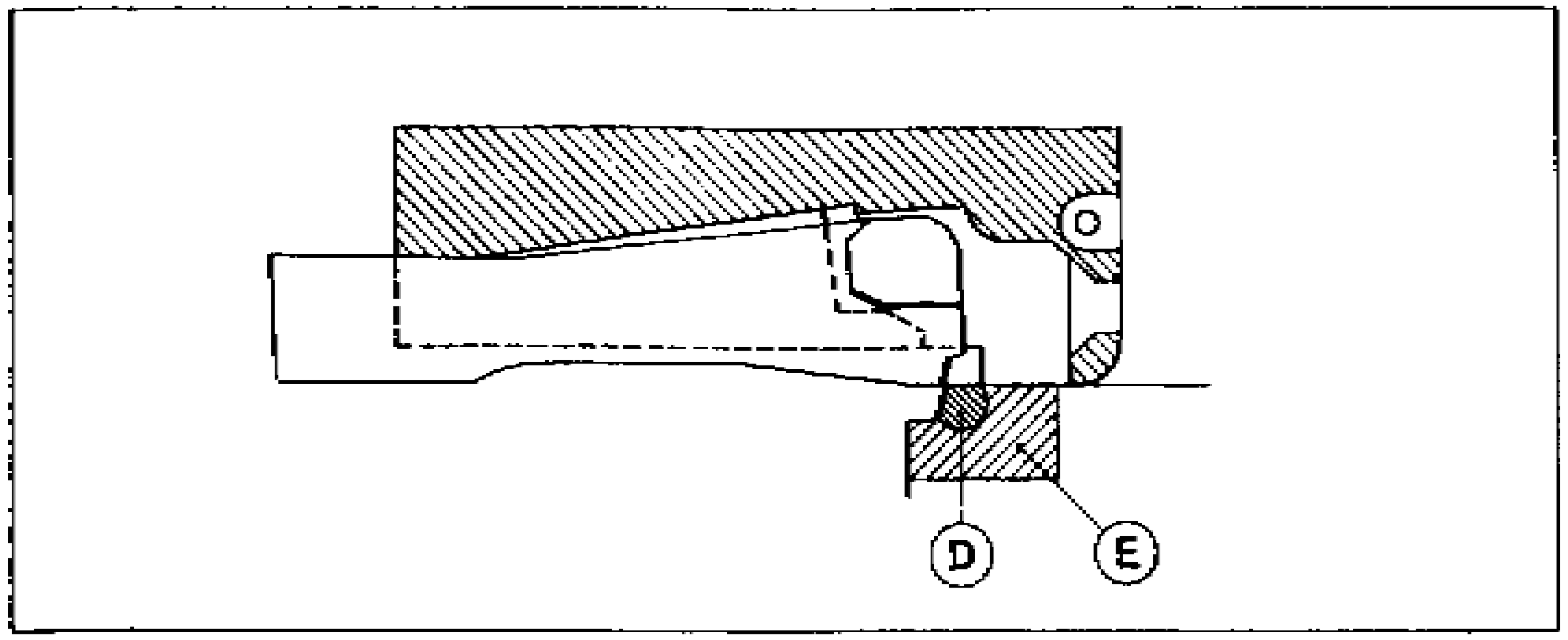


Fig. 7

b. **Extraction**

— The shoulders of the slide (B2) engage those of the breech block (C2) (fig. 8) and the slide and breech block travel to the rear together.

— During this movement, the extractor claw withdraws the spent case rearwards from the chamber, holding it in the breech block recess.

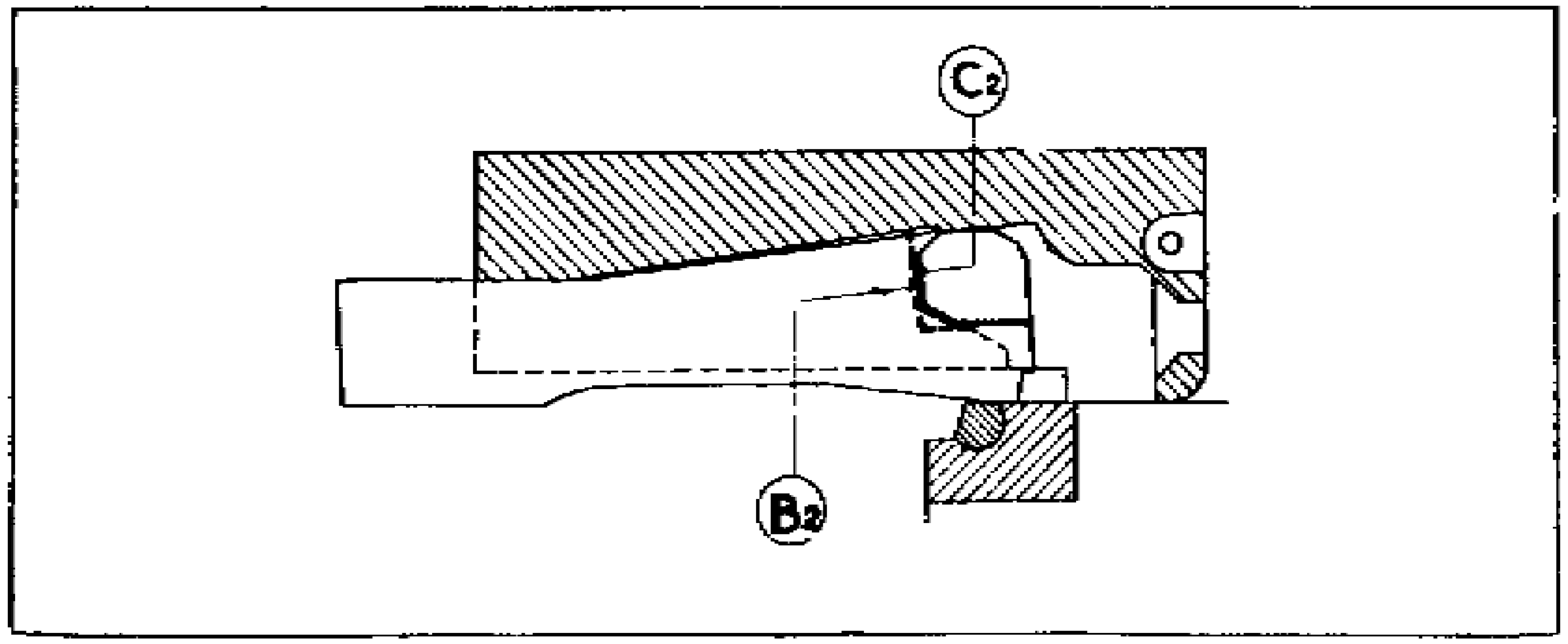


Fig. 8

c. **Ejection**

— When the breech block recess is almost at the same level as the rear face of the ejection opening, the spent case contacts

the ejector, which projects into the breech block recess; the case is then thrown out of the gun to the right (fig. 9).

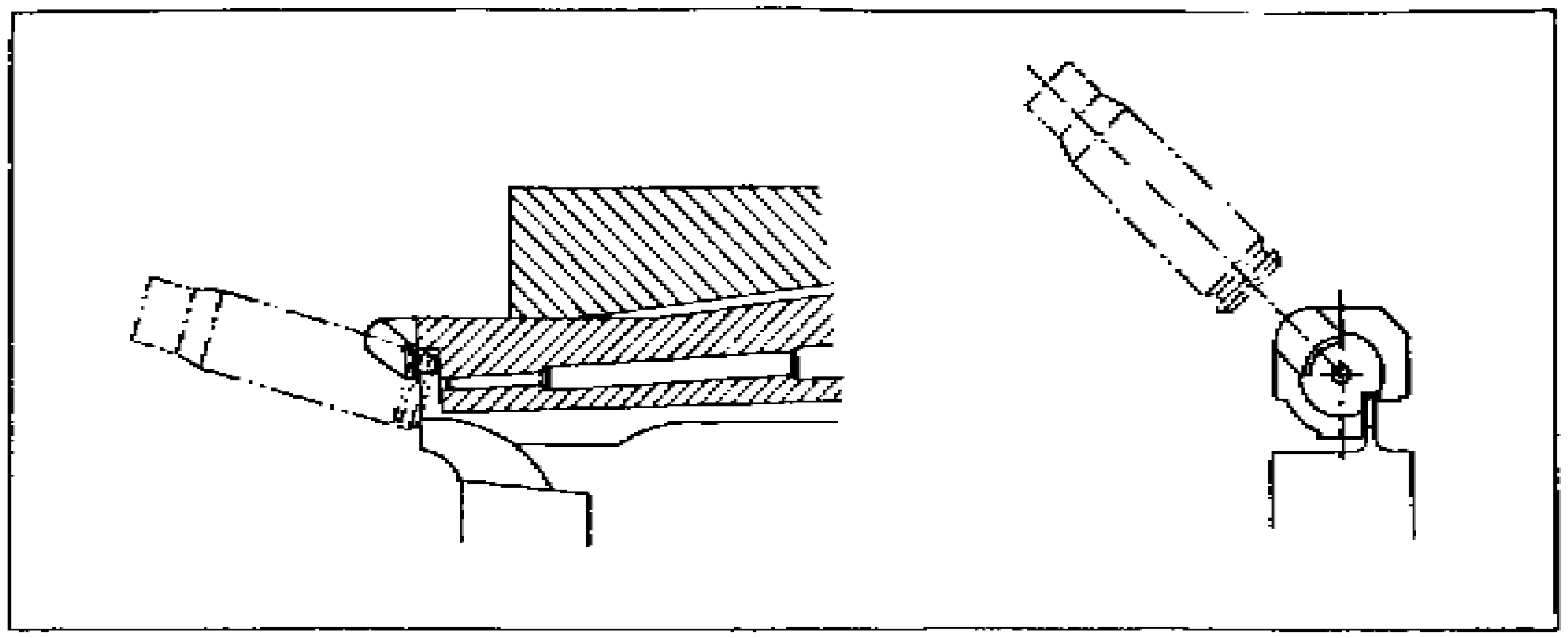


Fig. 9

— After ejection, the mechanism continues to move to the rear until the slide-breech block assembly comes into contact with the trigger frame.

— During the backward movement, the slide rod, hinged to the slide, has been compressing the return springs housed in the butt.

3. FORWARD ACTION OF THE MECHANISM

a. Beginning of movement

— The return springs relax and through the slide rod push the slide forward; the ramps of the breech block (C3) and slide (B3) (fig. 10) engage and push the breech block forward.

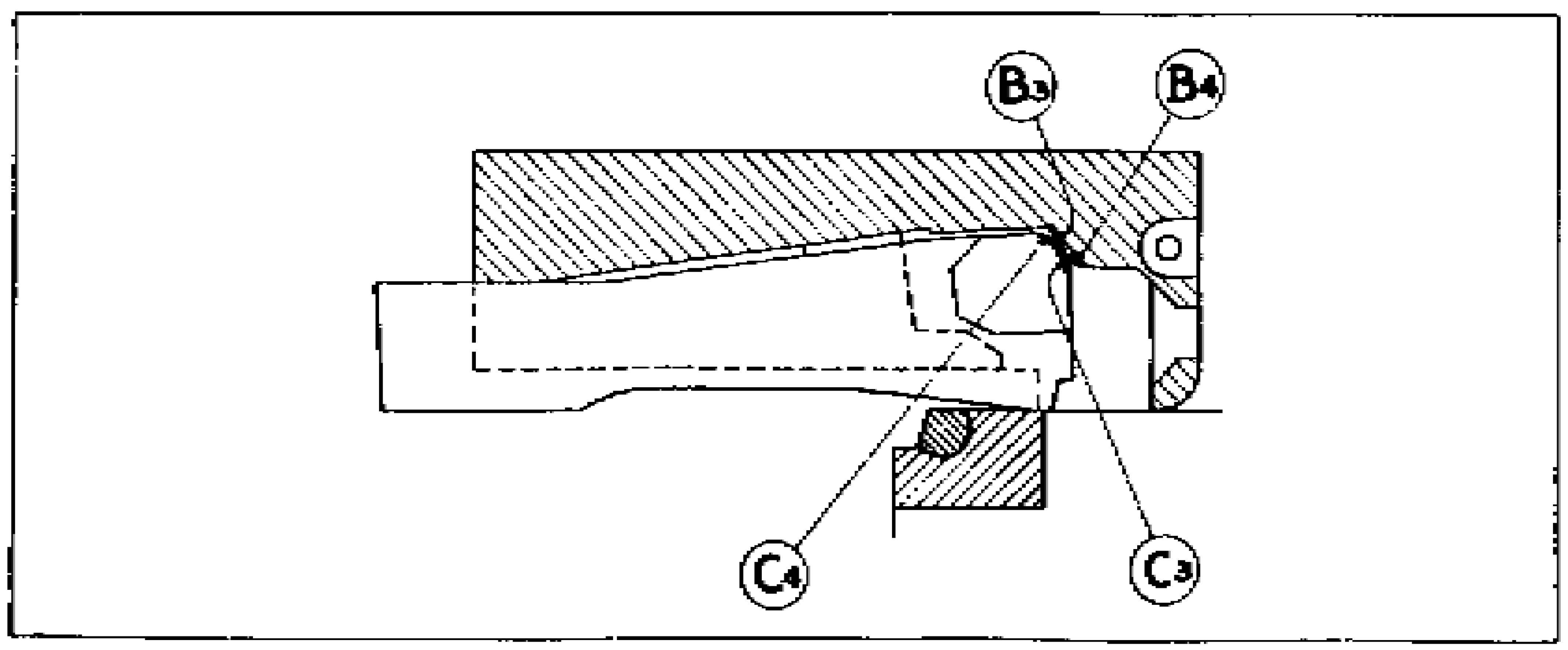


Fig. 10

b. Feed

— During the latter part of the rear movement of the working parts, the rounds in the magazine are raised under action of the magazine spring, until the top cartridge comes into contact with the lips of the magazine.

— As the mechanism moves forward, the lower front face of the breech block engages the top of the base of the uppermost round in the magazine and pushes it forward.

— As it moves, the apex of the round encounters the ramp leading to the chamber, which directs it towards the chamber and partly disengages it from the front lips of the magazine.

— The base of the cartridge is, however, still held in the rear lips of the magazine.

c. Introduction of round

— Under pressure of the breech block, the base of the cartridge is released and the round pushed forward into the chamber.

— Continuing its forward course, the breech block forces the extractor to rise, thus allowing the base of the cartridge to lodge in its recess.

— The forward course of the breech block is completed and the gun is closed, but not locked.

d. Locking

— As the breech block comes into contact with the breech, the rear of the block is forced down by the interaction of inclined surfaces in the slide (B3) and breech block (C3).

— The locking shoulders of the slide (B4) and the breech block (C4) engage and the breech block is forced downwards, the locking shoulder finally engaging with the locking recess in the body.

— The weapon is now locked.

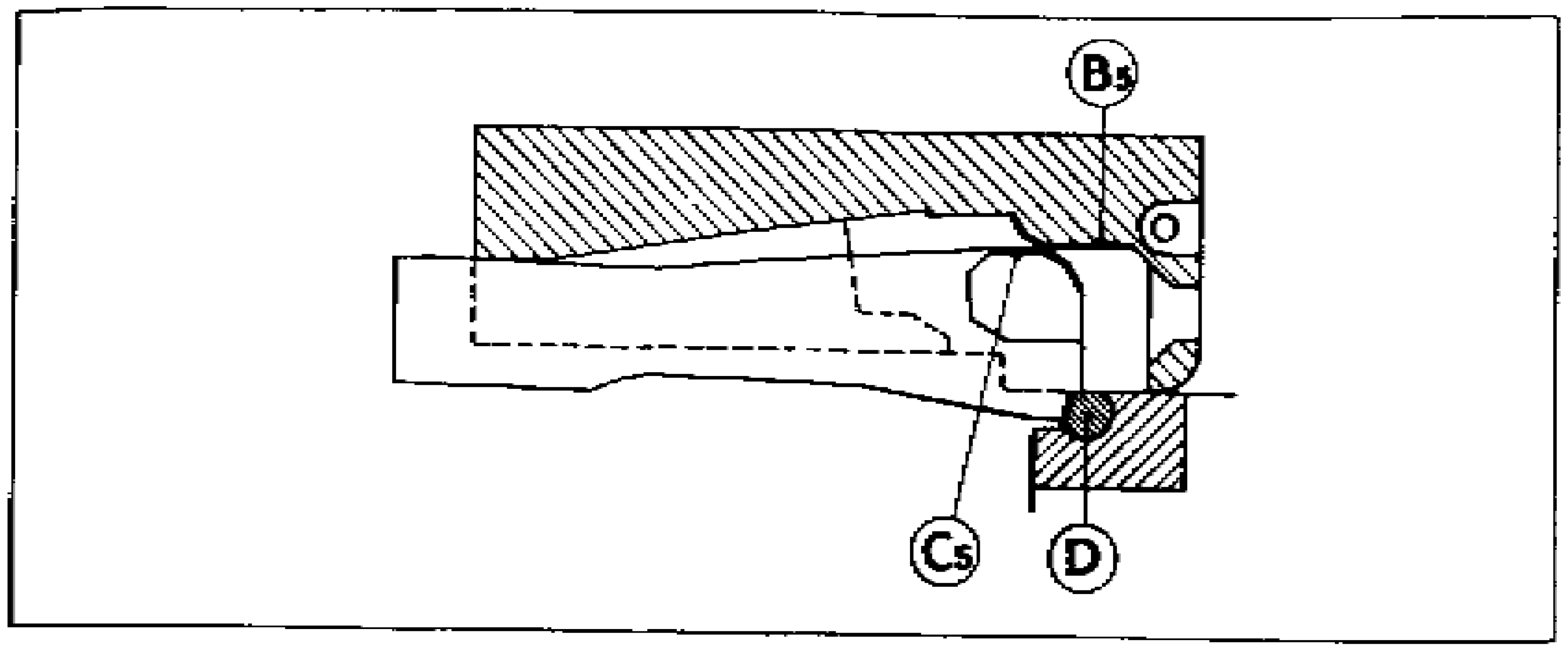


Fig. 11

e. Safeties

1. Confirmation of locking

— The slide continues its forward movement and its surface (B5) is brought above the breech block's surface (C5) (fig. 11), thus preventing the breech block from rising or unlocking.

2. Firing pin

— While the working parts are moving, the head of the firing pin is hidden by the slide (fig. 12).

— When mechanical locking takes place the firing pin head is uncovered by the slide taking up its foremost position. The hammer can only act on the firing pin from this point.

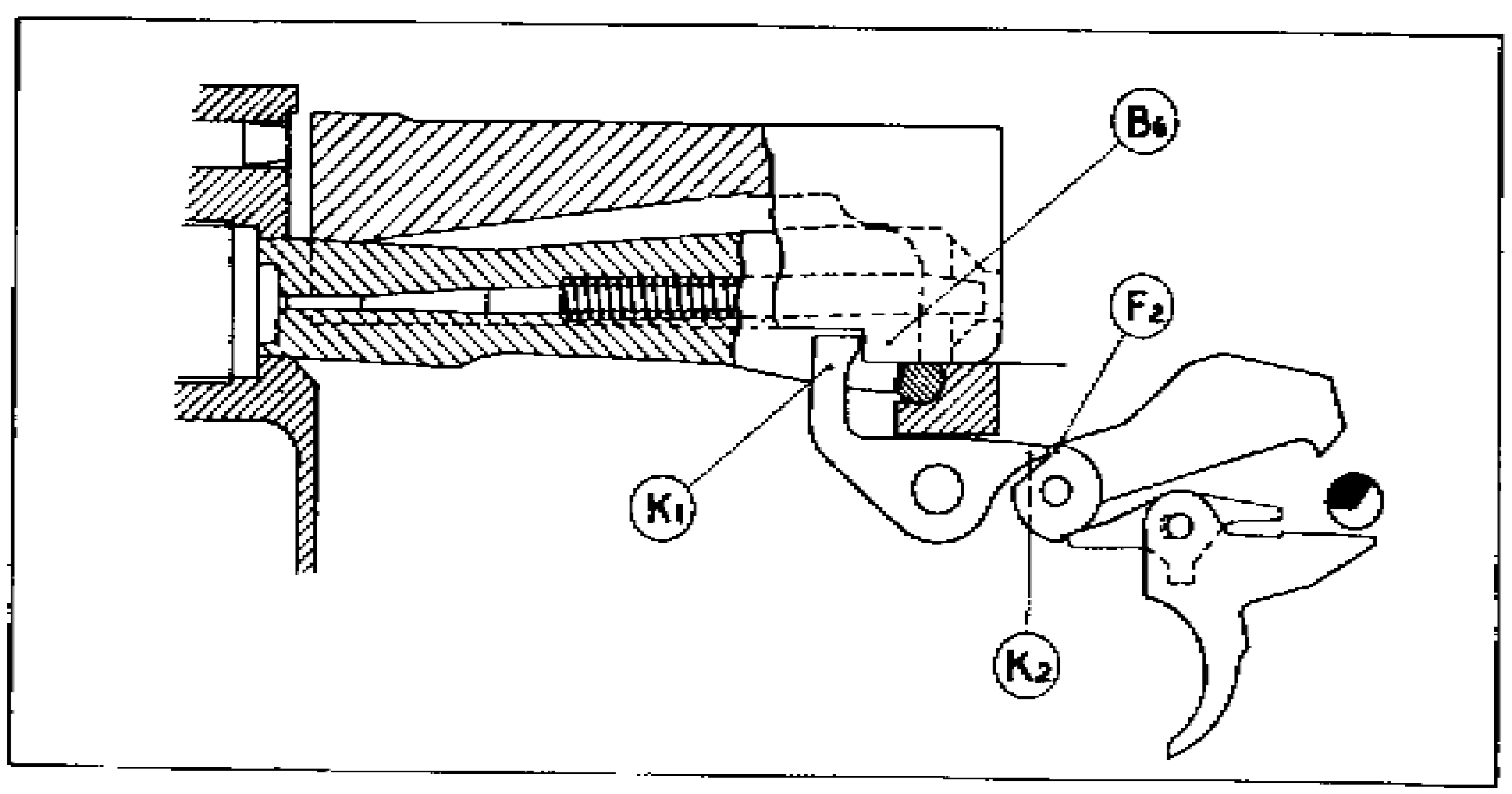


Fig. 12

3. Safety sear

— During the forward action of the moving parts, these keep the hammer down.

— As soon as the rear portion of the slide has passed the hammer, the latter rises and its bent (F2) engages with the nose (K2) of the safety sear, which holds it in the "cocked" position (fig. 12).

— Just before reaching its limit of travel, the shoulder (B6) on the rear bottom surface of the slide comes into contact with the arm of the safety sear (K1) (fig. 12).

— The safety sear, tripped by the slide, is released from the upper bent of the hammer (fig. 15); the hammer rotates forward until the lower bent (F1) is engaged by the nose of the trigger sear (G1).

4. HOLDING OPEN DEVICE

— When the last round has been fed out of the magazine, the rear projection on the magazine platform engages the stud of the holding open device.

— After recoil of the moving parts, the platform rises under action of the magazine spring and raises the holding open device (fig. 13) until it moves up into the body and checks the forward movement of the working parts.

— The weapon then remains open and the firer knows that his magazine is empty.

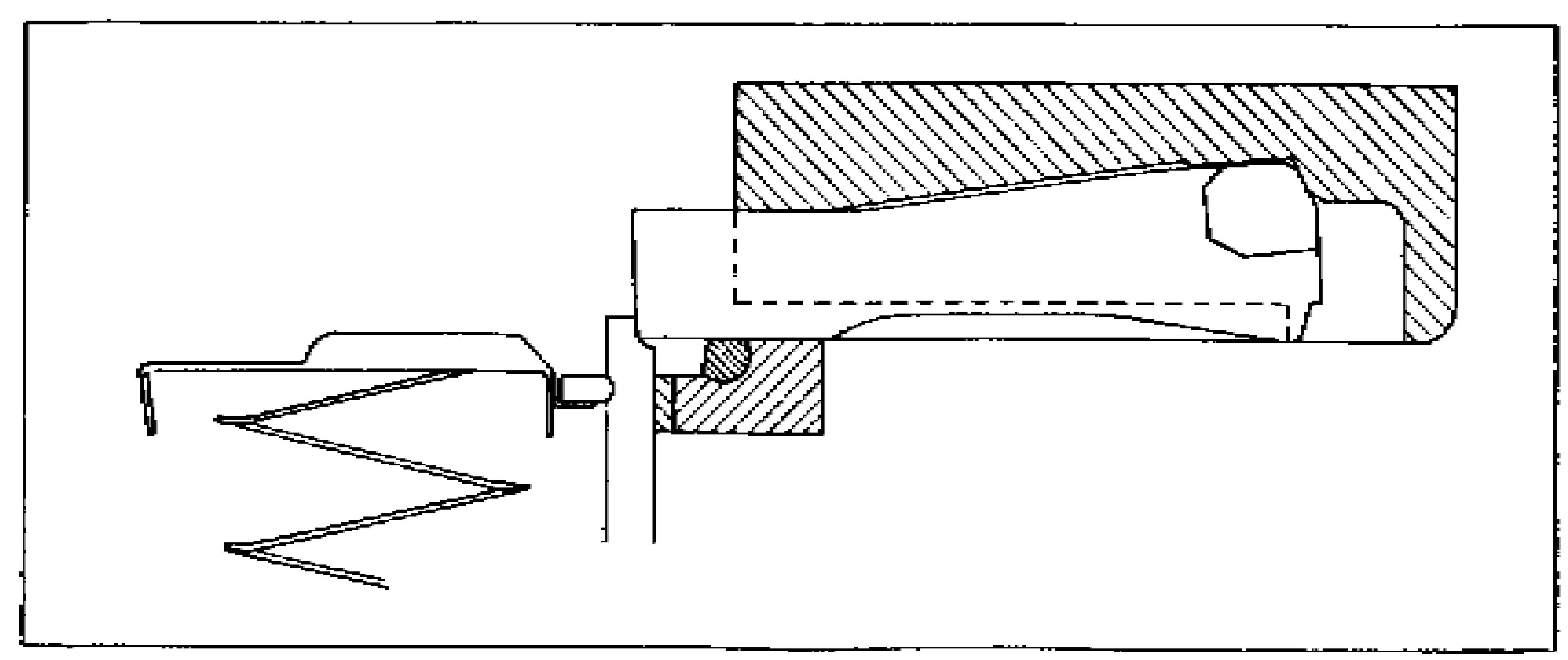


Fig. 13

5. TRIGGER MECHANISM

PLEASE NOTE

This section on the trigger mechanism is not wholly applicable to the American model in which full automatic fire is not possible.

Starting point:

Mechanism in the locked position;

Hammer cocked.

a. **Safe position**

— Applied safety is provided by setting the change lever at "S".

— In this position, the rounded edge of the change lever axis (J1) (fig. 14) is over the rear part of the trigger (H3), preventing it from rising to engage the tail of the sear.

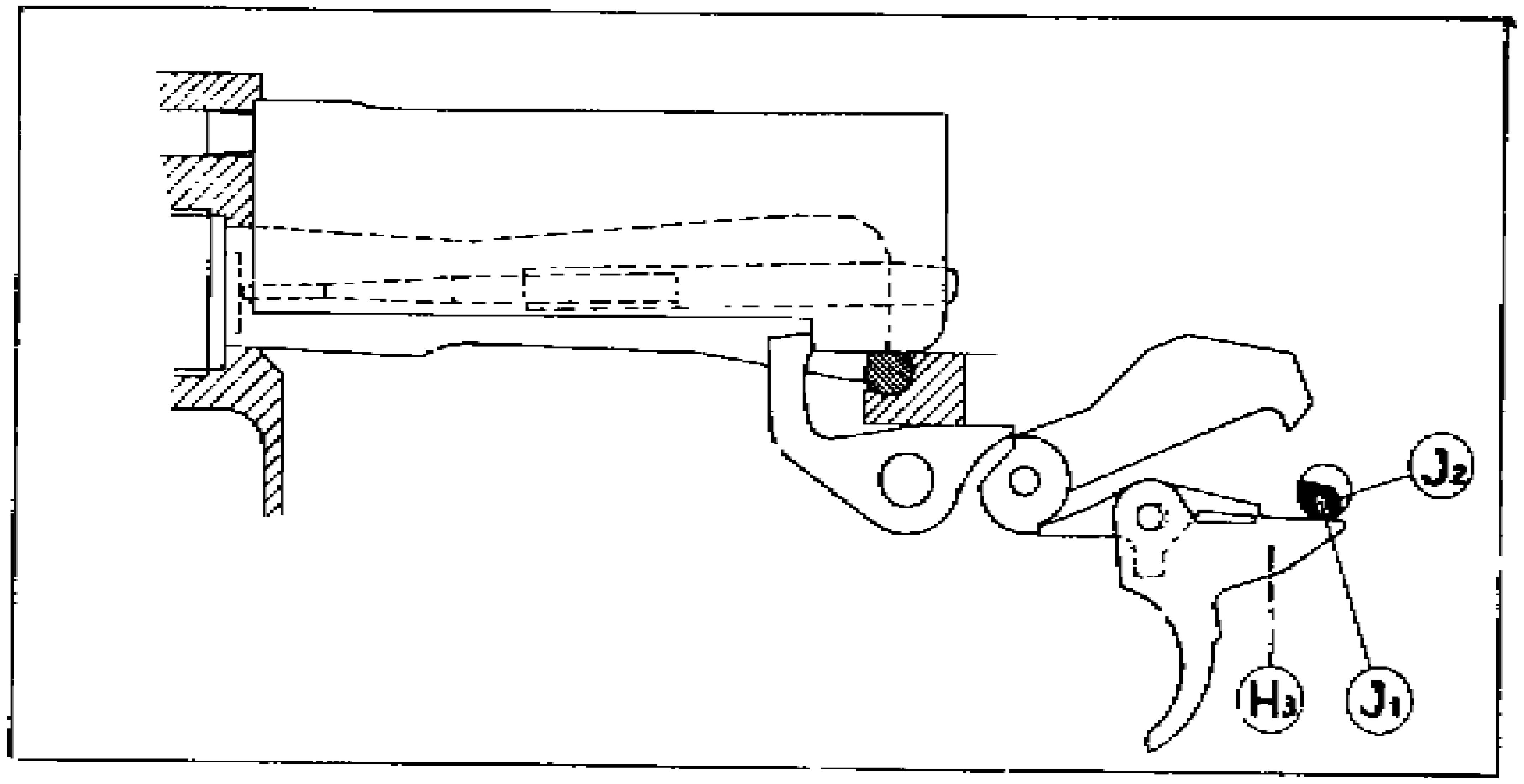


Fig. 14

b. **Semi-automatic fire position**

— The change lever is set at "R" (Single Shot).

— The change lever axis is now positioned with its shallowest notch (J2) in contact with the rear part (H3) of the trigger (fig. 15).

1. **Release of hammer**

— When the trigger is pressed, the rear shoulder (H2) of the trigger contacts the rear arm (G2) of the sear (fig. 15). (This gives the feeling of initial pressure.)

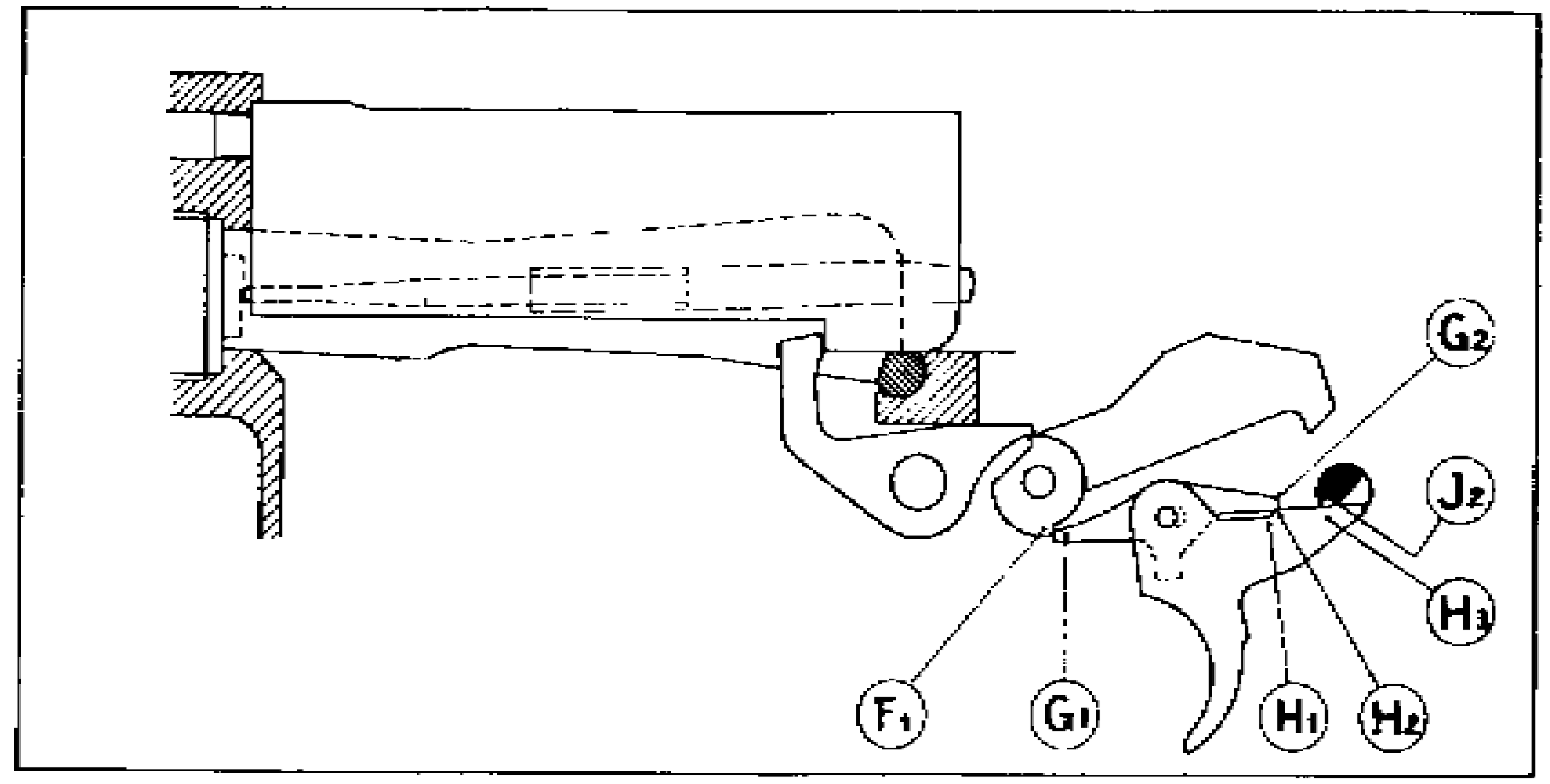


Fig. 15

— Continued pressure on the trigger causes the rear arm (G2) of the sear to pivot upwards.

— The nose (G1) of the sear is consequently disengaged from the hammer bent (F1); the hammer flies forward under the impulse of its spring and strikes the firing pin.

— As the hammer is released, the sear, on being freed from the bent, is moved forward by its spring (fig. 16).

— In this position, the rear arm (G2) of the sear loses contact with the rear shoulder of the trigger (H2) and drops into the step (H1) of the trigger: the nose (G1) bears up against the hammer spindle, in position to engage the hammer again.

2. **Recocking of hammer**

— As the working parts move backward, the rear bottom surface of the slide rotates the hammer to the rear and downwards; as the mechanism moves forward the hammer follows until the upper bent contacts the safety sear (see page 15, safety sear, Para. 3. e. 3.).

— At the end of the forward movement, the slide trips the safety sear, which frees the hammer.

— The hammer pivots sligthly around its pin and again moves forward to be caught by the nose (G1) of the sear in the lower hammer bent (F1), causing the sear to withdraw against the vertical part of the rear shoulder of the trigger (H2) (fig. 15)

— On releasing the trigger, the trigger plunger and spring force

the trigger forward, thus lowering the rear shoulder (H2). The sear is now freed and the hammer forces it slightly back to its original position (fig. 15).

III. OPERATION

a. Filling the magazine

1. With a magazine filler

A magazine filler (fig. 17) can be used to fill magazines.

This is fitted over the mouth of the magazine; with the clip guides turned to the rib of the magazine, insert a loaded clip into the guides and with the thumb close to the clip, push the rounds down into the magazine.



Fig. 17



Fig. 18

2. Without a magazine filler

Take the rounds out of the clip and insert them one by one into the magazine, with the base of the cartridge to the rib of the magazine (fig. 18).

b. Cocking

The initial cocking of the weapon is done by hand, using the cocking handle on the left hand side of the body. The left hand is used for this operation, leaving the right hand on the pistol grip, ready to fire.

To insert a filled magazine, the front end should be fitted foremost (fig. 19) into the magazine housing, underneath the body; with a swinging movement, push magazine fully home, where it is secured by the magazine catch.

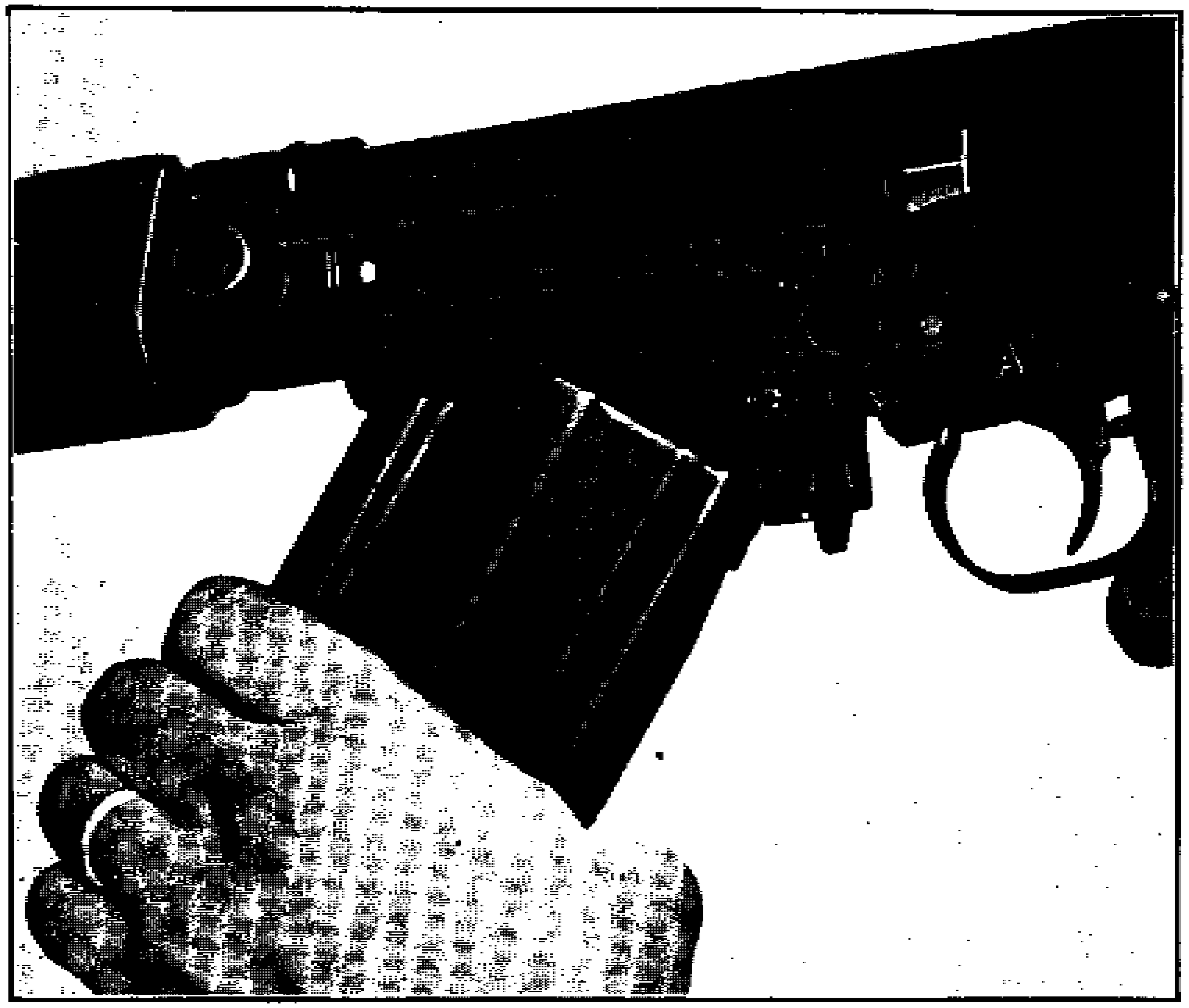


Fig. 19

When the cocking handle is pulled fully to the rear, the mechanism is brought back and the return springs compressed. When the cocking handle is released, the mechanism is sent forward under action of the return springs.

These are housed in the butt and act on the slide through the slide rod, hinged to the rear surface of the slide.

As it moves forward, the breech block exerts pressure on the first round in the magazine and pushes it forward into the chamber, while the extractor claw engages the groove of the cartridge case.

The rifle is now loaded and ready to fire.

As the cocking handle does not move when the gun is fired, it is not a danger to the face of the user, nor does it hinder his aim.

c. Changing the magazine

After the last round has been fired, the mechanism is kept to the rear by the holding open device. The empty magazine must then be replaced by a filled one and the mechanism allowed to go forward by depressing the holding open device (fig. 20), the end of which projects on the left side of the body between the rear surface of the magazine and the trigger guard.

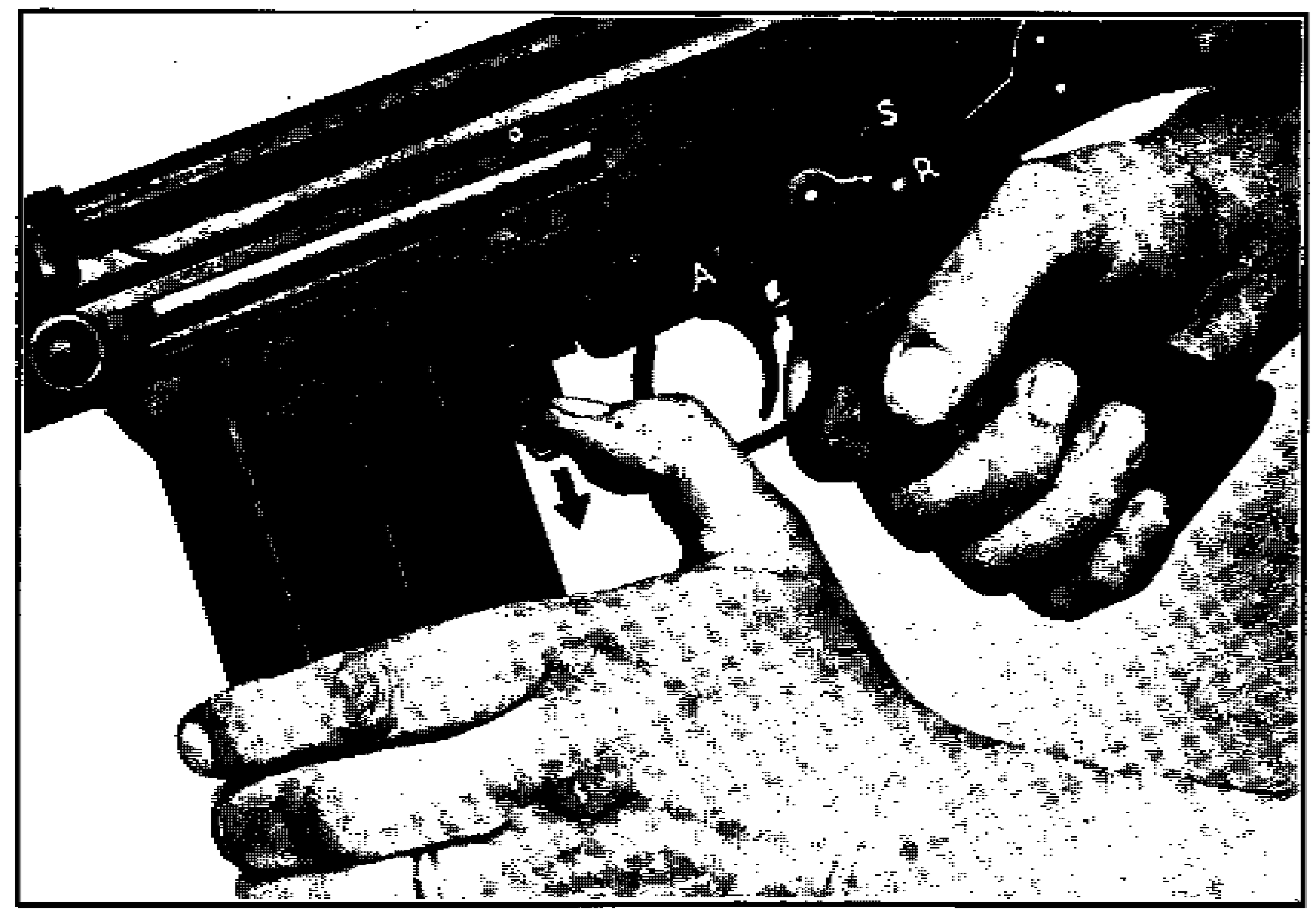


Fig. 20

d. Unloading

Put the weapon at safe; pressing the magazine catch,

release the magazine and remove it by pulling down and forward (fig. 21).



Fig. 21

Pull the cocking handle fully back so that the cartridge in the chamber can be ejected, then release the cocking handle.

The weapon is now unloaded.

e. **Use as a single shot rifle**

Turn the gas plug so that the letters "Gr" appear on top, instead of the letter "A".

With the magazine removed, pull the cocking handle fully back.

With the right hand, push the holding open device upwards (fig. 22). Keeping it in this position, let the mechanism come gently forward until it stops against the holding open device,

which keeps the mechanism in its rear position; the gun is then in the open position.

Still using the right hand, insert a round into the chamber, pushing it fully home with the thumb.

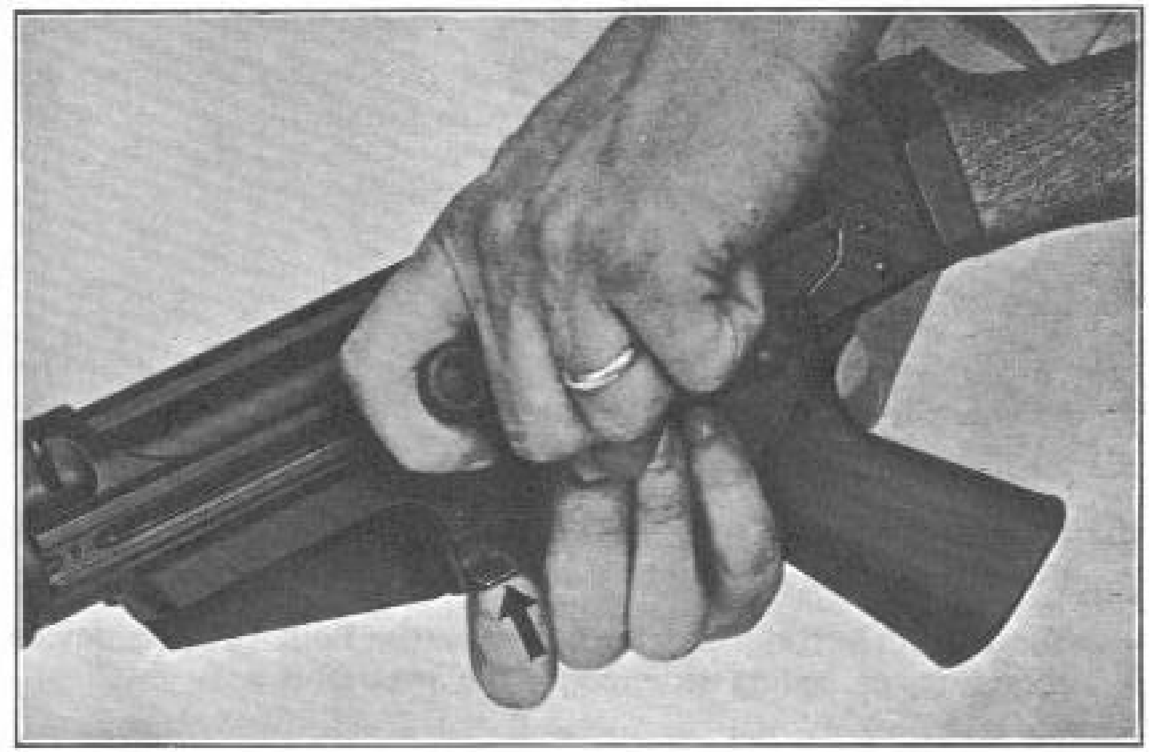


Fig. 22

Press the holding open device downwards (as for loading by magazine), the mechanism will then move forward, impelled by the return springs, and the rifle is ready to fire.

The same operation must be repeated for each round.

IV. GAS SETTING

The purpose of the gas regulator adjustment is to ensure correct functioning of the weapon, with maximum gas exhaust, or rather minimum gas intake necessary to operate the rifle efficiently, without causing undue wear on the moving parts.

1. Method of adjustment

Methods of gas regulator adjustment may vary according to individuals, but we suggest the following procedure:

— Fit an empty magazine on the rifle.

— All firing is then effected by inserting the cartridges into the chamber, one by one, through the ejection opening.

— The correct setting is determined by the holding open device engaging, or failing to engage, the mechanism.

2. Operations

Operation 1. Starting with the gas regulator sleeve fully screwed against the gas block (fig. 23), unscrew the sleeve one turn so that the figure "7" on the sleeve is in line with the axis of the rifle (fig. 24); this is the fully open position of the gas regulator sleeve and, when a round is fired, causes a short recoil (holding open device fails to engage the mechanism).

Operation 2. Screw the gas regulator sleeve forward click by click and fire a round after each adjustment, until the holding open device engages the mechanism (fig. 13).

Operation 3. Verify this adjustment by firing several rounds single shot by the method mentioned above.

Operation 4. If any shot results in a short recoil, repeat operation 3, after closing the gas regulator sleeve by one click.

Operation 5. If necessary, repeat operation 4, until 5 consecutive rounds give correct functioning.

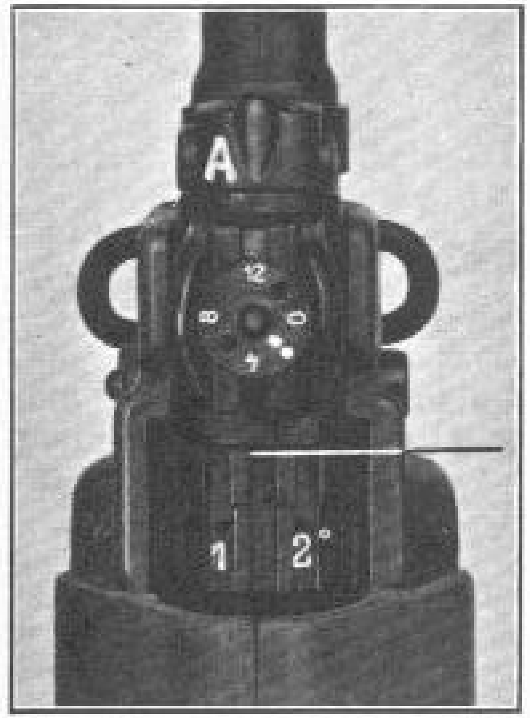


Fig. 23

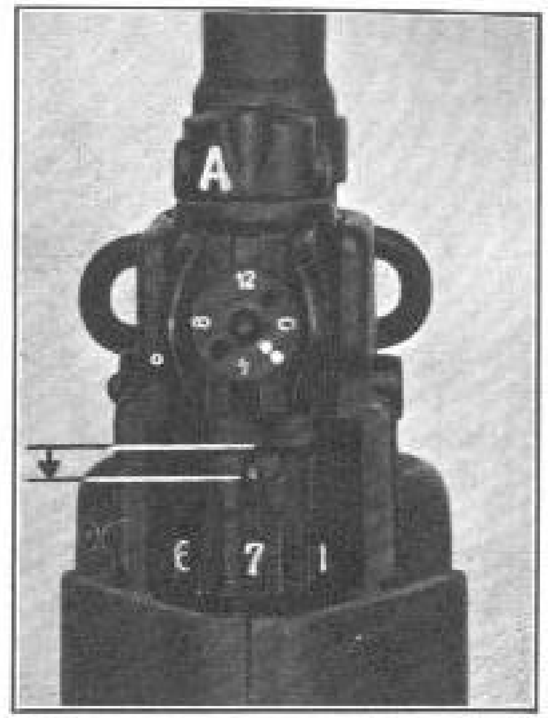


Fig. 24

Operation 6. Correct setting is now determined, but it is always advisable to allow a safety margin and screw the gas regulator sleeve forward by two further clicks.

N. B. If the special spanner (fig. 25) is not available, adjustment can be made with the nose of a cartridge (fig. 26), or even by hand.

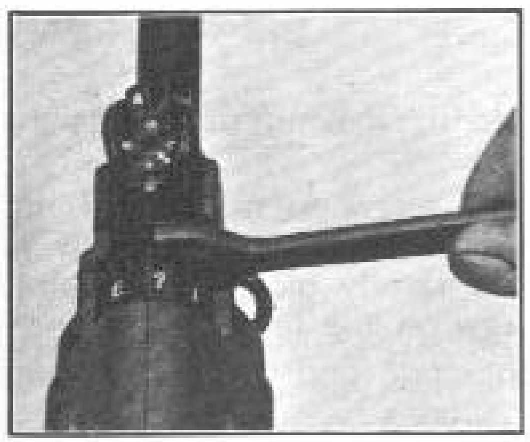


Fig. 25

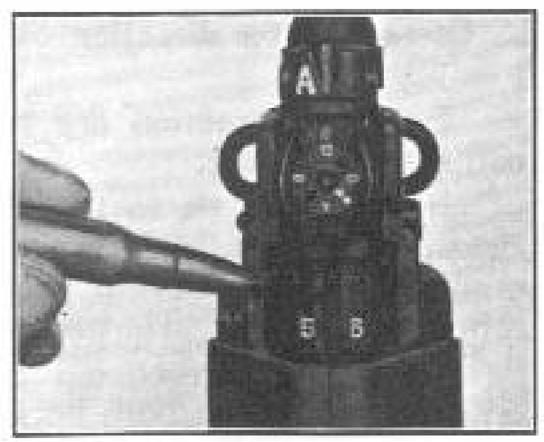


Fig. 26

V. ZEROING

The rifle is zeroed before issue to the user, but it may perhaps need some adjustment to correct elevation and direction, to individual requirements.

Zeroing must be carried out by a qualified armourer, who will have the special type tools for moving the foresight and spare foresights, if required.

1. Correction for elevation

Errors in elevation are corrected by screwing the foresight up or down. If it is screwed up, the M.P.I. (Mean point of impact) will be moved down and vice versa.

The spring and retaining catch locate and hold the foresight in position; this forms a clicking device with the outer circumference of the foresight, which is serrated into 16 divisions, which assists the armourer when calculating movement of the M.P.I.

One division (or click) is equal to a variation in M.P.I. of 1 cm at 100 metres.

2. Correction for direction

Errors in direction are corrected by moving the backsight to the right or left.

If the M.P.I. is to the right, the screw on the left of the backsight is slightly loosened, and the screw on the right is screwed up, thus moving the sight laterally along its dovetail from right to left. Tighten the screw on the left.

When the correction has been made and before shooting commences, tighten both backsight screws.

If the M.P.I. is to the left, the backsight is moved similarly, but from left to right.

Moving the backsight screws 1 division (or click) is equal to a variation in M.P.I. of 1 cm at 100 metres.

VI. IMMEDIATE ACTION AND STOPPAGES

1. Immediate action

If the rifle fails to function when fired, there is a "stoppage".

A mechanical stoppage, other than that caused by an empty magazine, can often be corrected by taking immediate action without investigating its cause.

2. Procedure for immediate action

Operation 1. Remove the magazine.

Operation 2. Pull the cocking handle fully to the rear so that a defective or wrongly positioned round can be cleared from the mechanism.

Operation 3. Release the cocking handle to allow the mechanism to move forward.

Operation 4. Replace the magazine.

Operation 5. Recock the weapon then release the cocking handle, so that a new round is fed into the chamber.

Operation 6. Resume firing.

If the stoppage recurs, find out the cause.

3. Stoppages

Regular cleaning and correct maintenance will ensure that stoppages with this rifle are very rare. Their chief cause is insufficient gas, which may be due to incorrect setting of the gas regulator, fouling of piston head or gas plug, or some obstruction fouling the mechanism. The following tabulation indicates types of stoppages, their causes and remedies.

1. Failure to feed

Causes	Remedies
— Short recoil, or insufficient gas: the breech block is not driven far enough to the rear, either for extraction or ejection of the spent case, or to feed the next round.	Reduce gas exhaust by adjusting gas regulator sleeve.
— Too much gas: the breech block overrides the round in the magazine (violent recoil and ejection).	Unscrew gas regulator sleeve to increase gas exhaust.
— Dirty magazine.	Clean.
— Damaged magazine.	Examine and replace by new magazine, if necessary.

2. Failure to introduce

Causes	Remedies
— Dirty chamber.	Clean chamber.
— Dirty rifle.	Clean rifle.
— Defective cartridge.	Immediate action.
— Separated case.	Extract the part of case which remains in the chamber.

3. Failure to fire

Causes	Remedies
— Defective cartridge.	Immediate action.
— Broken firing pin.	Replace firing pin.
— Incomplete closing of mechanism, due to fouling.	Clean rifle.

4. Failure to extract

Causes	Remedies
— Insufficient gas.	Adjust gas regulator sleeve
— Dirty chamber.	Clean chamber.
— Dirty cartridges.	Clean cartridges.
— Broken extractor.	Replace extractor.

5. Failure to eject

Causes	Remedies
— Insufficient gas.	Adjust gas regulator sleeve.
— Fouling of receiver.	Clean.
— Broken ejector.	Replace ejector.

6. Failure of holding open device

Causes	Remedies
— Insufficient gas.	Adjust gas regulator sleeve.
— Fouling of holding open device.	Clean.
— Damaged magazine.	Examine and replace, if necessary

VII. GRENADE LAUNCHING

1. Flash-hider/grenade launcher

The Light Auto Rifle (L.A.R.) is equipped with a new combined device, serving as both flash-hider and grenade launcher; with this fitment, anti-tank and anti-personnel grenades can be launched with great accuracy.

This device consists of a tube, fitted to the muzzle of the barrel, on which the grenade is positioned. A spring retainer holds the grenade in place. Four lines of oblique holes are drilled towards the fore-end of the tube, in a setting designed to eliminate flash (fig. 27).

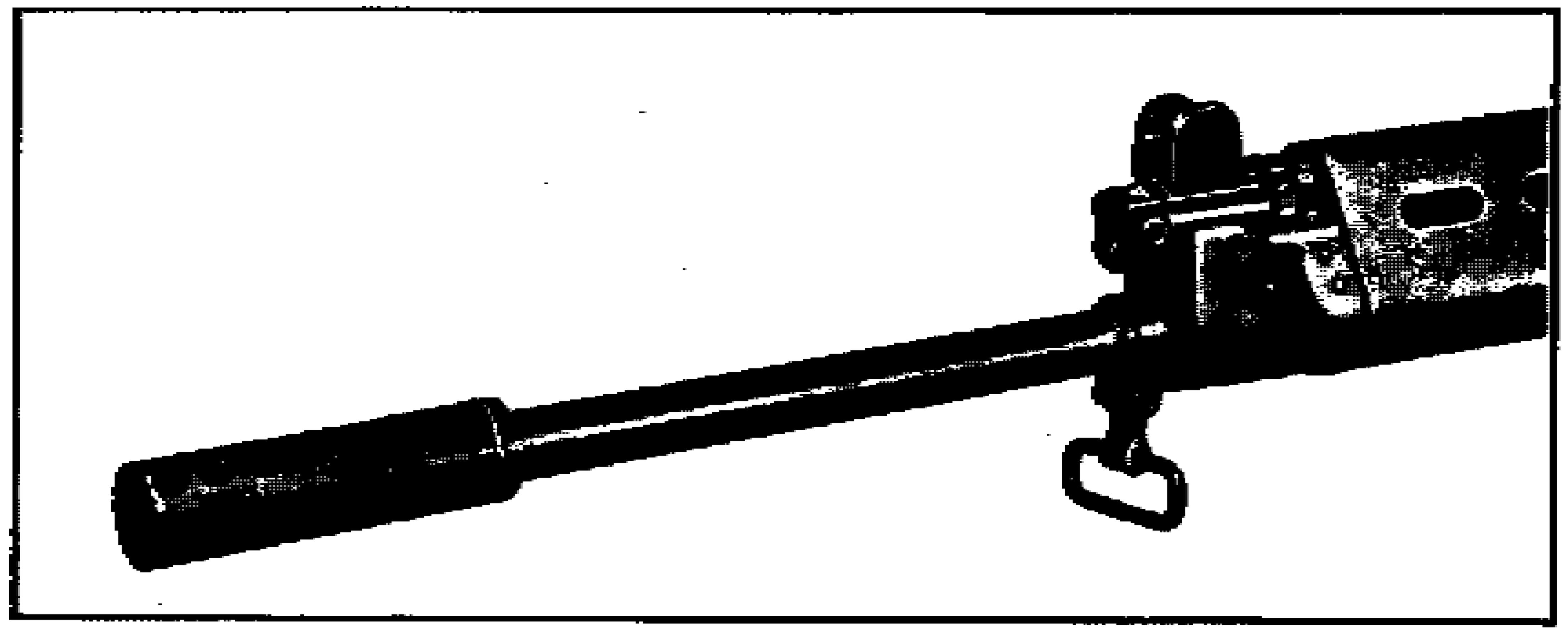


Fig. 27

The fore-end is threaded to take a blank firing device, which is screwed on and secured by pawl and ratchet.

The rear surface is slotted to secure the bayonet.

The pistol-grip allows grenades to be fired in a more comfortable way than is possible with the majority of other weapons. The firer can keep his finger on the trigger; when recoil occurs, the hand on the pistol-grip moves back with the rifle's recoil and the index finger is not exposed to the type of accident which is always feared when firing grenades with other weapons. This safety element is an undoubted advantage, which is conducive to better accuracy when the soldier is firing grenades.

2. Grenade sight

The L.A.R. required specially for grenade firing is fitted with a sight which can be turned down, fixed to a special gas plug, which can easily be substituted for the ordinary plug. The effect of this special gas plug is to suppress gas action on the piston head, when the sight is raised. When the sight is folded down to the rear, it allows the rifle to be fired normally (fig. 28).

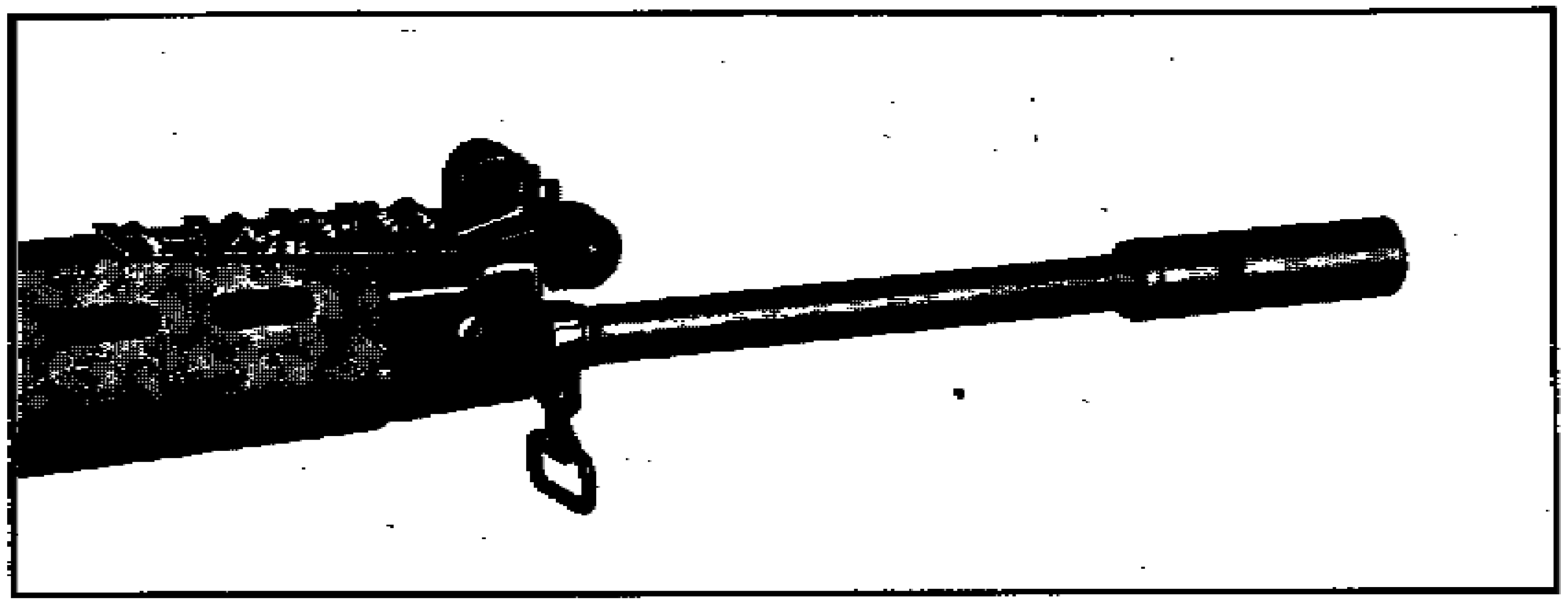


Fig. 28

This sight usually has two sets of graduations for firing F. N./STRIM grenades.

The graduation on the left is scaled for distances of 100, 150, 175 and 200 metres for the anti-personnel grenade 32 Z; the other, on the right, is scaled for distances of 50, 75, 100, 125 and 150 metres for the anti-tank grenade AC.

For direct firing, sighting is by aligment of the index mark (raised or hollowed) for the distance and the dead centre of the fore-end of the grenade.

For firing at maximum distance (indirect fire), lean the rifle on the heel of the butt, incline at an angle of approx. 45° from the horizontal and turn in the direction required (fig. 35).

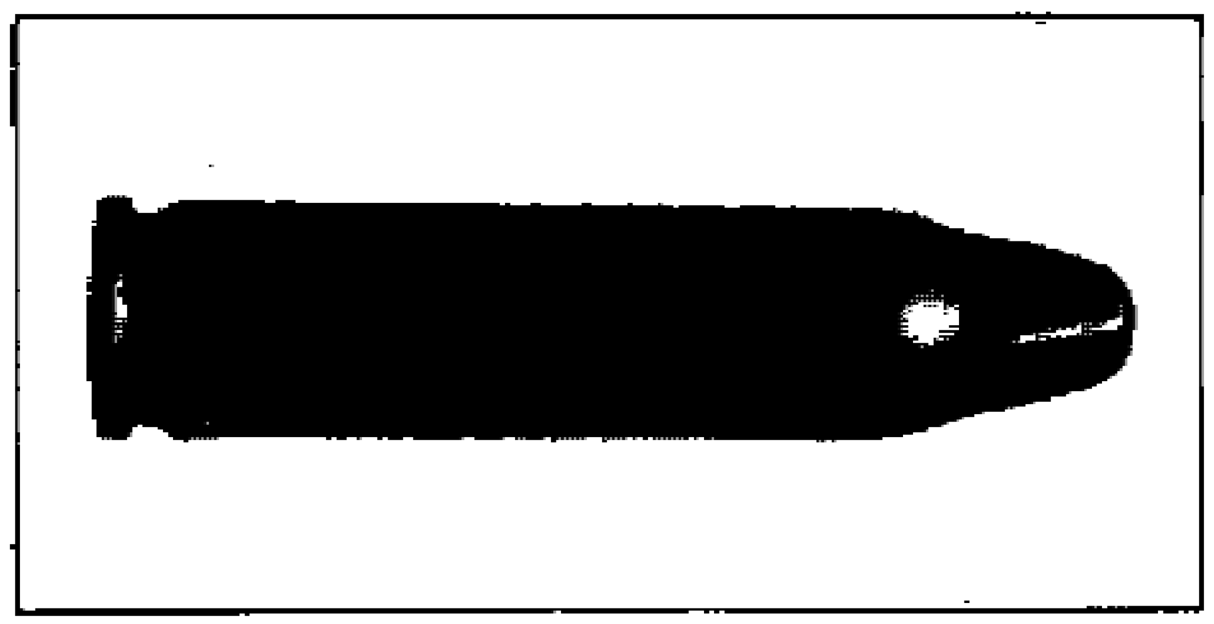


Fig. 29

3. Cartrigde

A special type of cartridge is used, generally known as a propulsive, or grenade, cartridge. This cartridge has no bullet and the mouth of the case is closed by a "star" crimping, which is waxed to ensure complete tightness (fig. 29).

4. Handling

Operation 1. Put the rifle at SAFE.

Operation 2. Unload (see d; Chapter III).

Operation 3. When the L.A.R. is provided with a gas cylinder plug with a grenade sight, turn this plug 180°, to suppress action of the gases on the piston head. This is done by pressing down on the axis of the grenade sight leaf and turning the sight forwards. Turn the plug a half-turn anti-clockwise, using the sight to help with this (fig. 30).

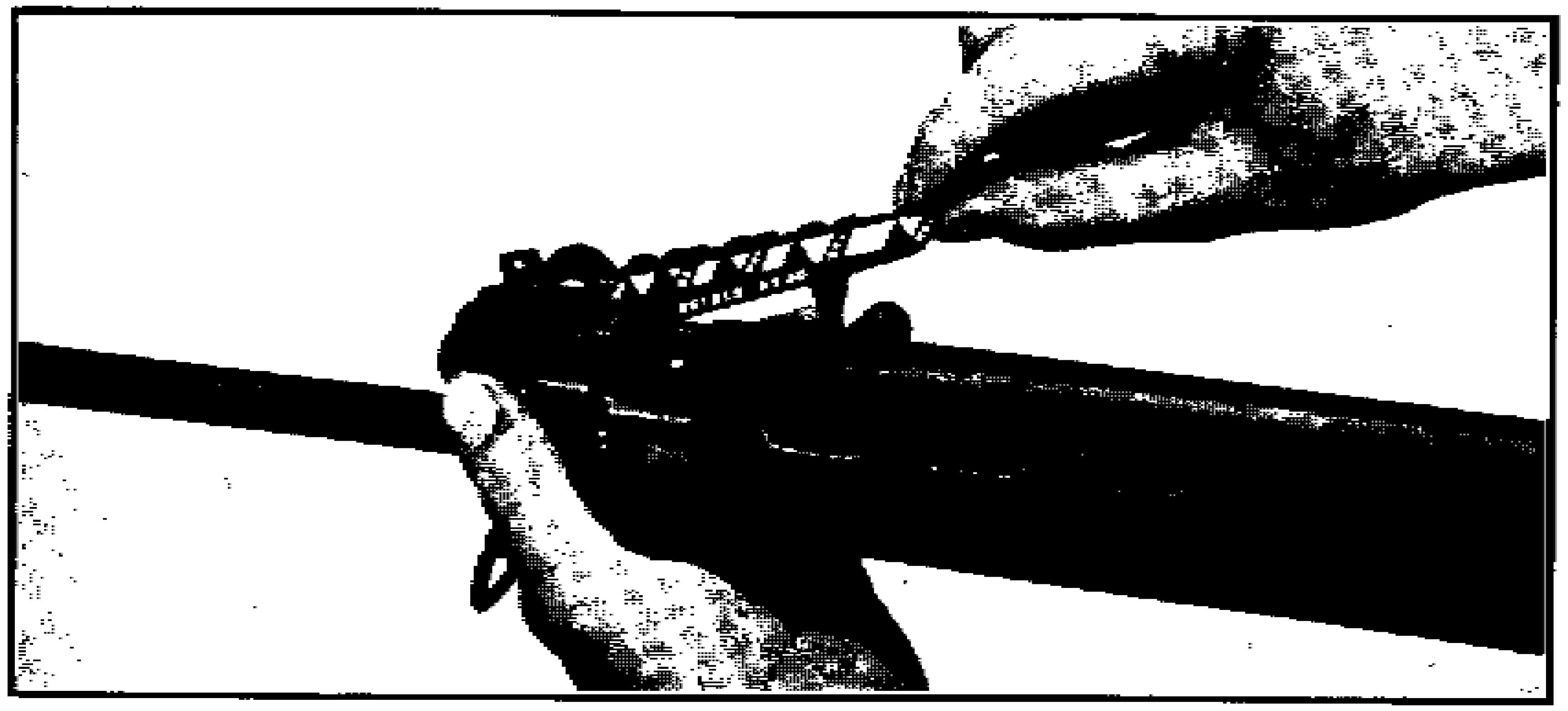


Fig. 30

Now raise the sight to the vertical position, i.e. the position in which the two lower claws enclose the foresight block (fig. 31).

Operation 4. With the left hand, cock the rifle.
With the right hand, insert the propulsive cartridge in the chamber (fig. 32).

Let the mechanism go forward (it is easier if the muzzle of the rifle is held downwards).

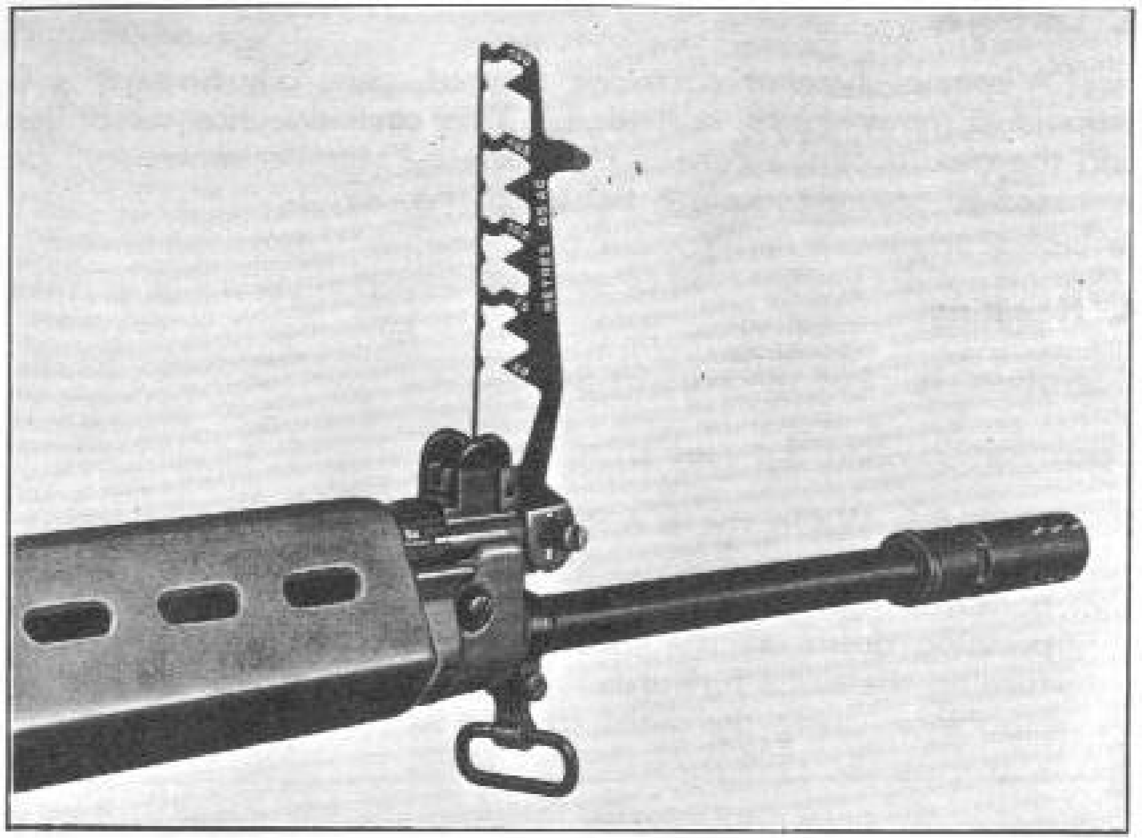


Fig. 31

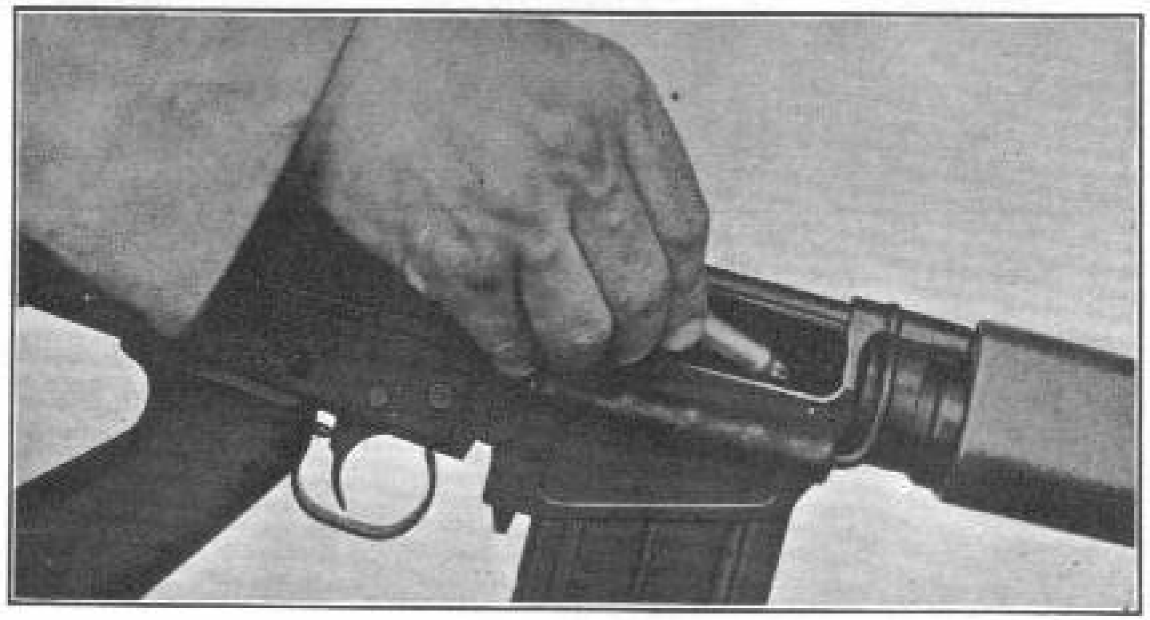


Fig. 32

Operation 5. Put the grenade on the launcher and ensure that it is fully home.

Operation 6. Release the safety from the rifle and finally the grenade safety should be removed. The rifle is then ready to fire.

If the L.A.R. has not been supplied with the special gas plug with grenade sight, this must first be fitted.

To do this, proceed as follows:

a) Remove the existing gas cylinder plug (chapter IX-1-e).

b) Replace it by a plug with grenade sight:
Insert the plug by pressing down the piston spring, with the notched end of the axis for the sight leaf turned towards the barrel and exerting pressure on it to make the axis rise onto



Fig. 33

the collar of the barrel, in front of the front sling swivel (fig. 33).
Push the plug fully home, then turn the sight-plug assembly a quarter of a turn clockwise.
Turn the sight down to the rear against the foresight block.

N. B. — Firing grenade without sighting, or at 45°, can be done with the standard gas plug, provided this is turned through 180° so that the letters "Gr" appear uppermost, instead of the letter "A".

5. Firing position

a) **Direct fire** (fig. 34)

— For the three usual positions (standing, kneeling, prone) the method of holding the rifle is identical.

— Grasp the middle of the handguard firmly with the left hand.

— Hold the pistol grip firmly with the right hand, with the index finger secured in front of the trigger.



Fig. 34

— Hold the butt under the right armpit, **never** lean it on the shoulder.

b) **Indirect fire** (fig. 35)

— Dig the heel of the butt into the earth, with the pistol grip uppermost, i.e. towards the firer.

— Incline the weapon at the required angle.

— Hold the foot down on the toe of the butt to prevent it from moving its position.



Fig. 35

c) **Note**

So far as possible avoid placing the butt on any hard surface, such as concrete, rock, etc. This is particularly important for indirect fire and firing from the prone position, when the soldier naturally tends to anchor the toe of the butt, to avoid the jerk of recoil.

VIII. CLEANING AND MAINTENANCE

a. General

It must be emphasized that all automatic weapons have to be given constant care, cleaning and maintenance and that most of the stoppages previously mentioned in this brochure are the result of negligence on the part of the soldier, or ignorance regarding the working of this weapon. Any weapon, whether automatic or repeating rifle, must always be cleaned at the end of a day's firing, particularly after practice firing with blanks.

b. Maintenance of the rifle

1. Maintenance by the soldier

This maintenance of the F. N. rifle, cal. 7.62 mm. only requires a partial, or field stripping of the weapon and consists of:

— Repeatedly using the cleaning brush to clean the bore; this should be soaked in the special oil provided for this purpose;
— Two or three clean, dry rags should then be run through the bore;
— Cleaning the chamber with the scouring brush;
— Cleaning the slide, rear part of the barrel and inside the receiver;
— Cleaning the breech block, firing pin and its housing;
— Cleaning underneath the extractor claw, without stripping it;
— Stripping the gas plug, piston and piston spring, cleaning these parts thoroughly, as they are exposed to gas fouling;
— Cleaning and running a lightly oiled rag through the gas cylinder;
— Lightly oiling the moving parts.

2. Inspection and maintenance by a qualified armourer

It is essential that the weapon should be periodically inspected by the Unit's armourer, who will be able to check that it has been properly cared for by the soldier.

In addition, all the components of the rifle will then be checked for correct functioning. The armourer's inspection will also include:

— Cleaning the exhaust port in the gas cylinder;
— Stripping and cleaning the extractor;

— Checking the gas setting;
— Inspecting sights and correcting, if required.

c. Complete cleaning of barrel

It should be noted that the barrel must be regularly cleaned, as described below, and that it should never be necessary to use harsh abrasives, such as emery, sand or brick powder, which all have damaging effects.

This complete cleaning should be done unhurriedly, when circumstances permit, and following the procedure outlined below:

— Wash the bore with soapy water, using a solution of approx. 15 % black soap, with no acid content, or with a special cleaning oil should the cartridges used be provided with non corrosive primers; use the pullthrough and take special care to keep soapy water out of the mechanism.

— After cleaning, **dry thoroughly,** using clean rags of service flannelette; after drying, the last rag should be completely clean.

— Dry outside of barrel and rub with greasy rag.

— If the weapon is likely to be out of service for a certain time, a little barrel grease should be applied to the bore.

d. Assembly and oiling before firing

— Before firing, clean the rifle and assemble, noting that parts should be oiled lightly, or left dry, as under:

OILED	LEFT DRY
Inner surface of slide	Gas cylinder
Breech block	Plug
Body, lower surface and slide groove	Piston and spring
Holding open device	Barrel
	Chamber
	Outer surface of slide
	Front surface of breech block
	Magazine catch
	Magazine and magazine platform
	Sights

N. B. — The pistol grip of the L.A.R. has a hollowed compartment to take a small cleaning kit, i.e. an oil container and a tube which takes cord, pullthrough, etc.

IX. STRIPPING AND ASSEMBLY

The rifle has been designed to make stripping and assembly easy for the user. No force need be exerted if stripping is done in the correct order.

To facilitate assembly, care should be taken when stripping to lay out the parts on a clean level surface, in the order in which they are removed. This will prevent loss of parts and make assembly easier, as this is done in reverse order to stripping.

A. STRIPPING

Stripping the rifle is subdivided into 18 groups of operations. The soldier is only allowed to carry out the operations in groups 1 and 18.

The operations in other groups are not difficult and do not require any special skill, but too much stripping causes extra wear on certain parts and a few operations require special tools.

Groups of operations - Stripping

The tabulation overleaf details the 18 groups of operations for stripping.

Column 1. Number of group of operations.

Column 2. Specification.

Column 3. Number(s) of group(s) of operations to be done before the stripping about to be carried out.

Column 4. Stripping permitted to:
× Soldier,
×× Armourer,
××× Workshop.

Column 5. Number of page detailing operation(s) required.

1	2	3	4	5
1.	Field stripping	—	×	40
2.	Stripping the extractor . . .	1	××	45
3.	Stripping the handguard . . .	—	××	46
4.	Stripping the carrying handle .	3	××	47
5.	Stripping the gas regulator sleeve	1-3	××	49
6.	Stripping the front sling swivel .	—	××	52
7.	Stripping the foresight . . .	—	××	53
8.	Stripping the joint pin, trigger frame-body	1	××	54
9.	Stripping the safety sear . . .	1-8	××	57
10.	Stripping the cocking handle .	1	×××	58
11.	Stripping the magazine catch and holding open device .	1	××	62
12.	Stripping the locking shoulder .	1	×××	65
13.	Stripping the trigger mechanism and pistol grip	1-8	××	66
14.	Stripping the rear sling swivel and butt plate	—	××	76
15.	Stripping the return springs and butt stock	1-14	××	78
16.	Stripping the trigger frame-body lock mechanism	1-8-14-15	××	80
17.	Stripping the backsight . . .	—	××	83
18.	Stripping the magazine . . .	—	×	85

1. FIELD STRIPPING

The soldier should know each step in field stripping so well that he can do it in the dark. No tools are needed, but it may be necessary to use the nose of a bullet.

— Remove the magazine.

— Cock the mechanism to make sure there is no cartridge left in the chamber; let the mechanism go forward and put the rifle at safe, the hammer remaining in the cocked position.

a) **Stripping the mechanism**

— Press the trigger frame-body lock lever, on the left side of the trigger frame, fully **upwards;** hold the barrel group firmly and press the butt-trigger group downwards, swinging the rifle open like a shotgun (see fig. 36).



Fig. 36

Remove the slide-breech block assembly by grasping the slide rod, hinged to the slide (fig. 37).



Fig. 37

b) **To remove the cover** from the body, slide it to the rear (fig. 38).



Fig. 38

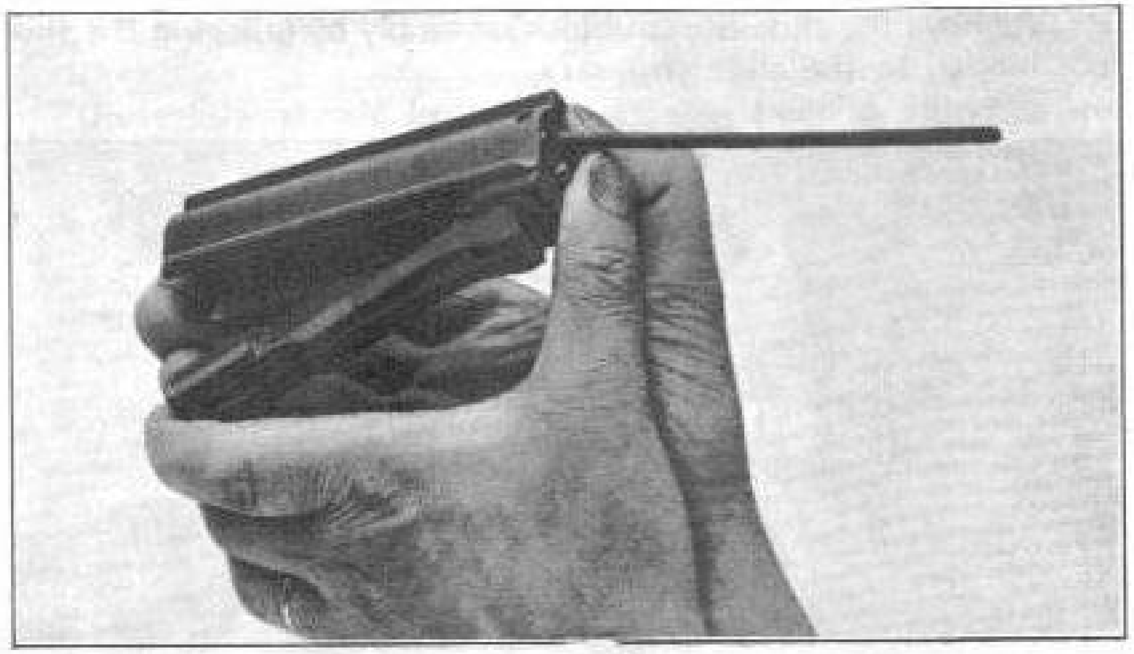


Fig. 39

c) **To separate the slide from the breech block,** disengage the fore part of the breech block from the slide and continue this movement, levering the rear part of the breech block and at the same time exerting pressure with the thumb on the rear end of the firing pin (fig. 39).

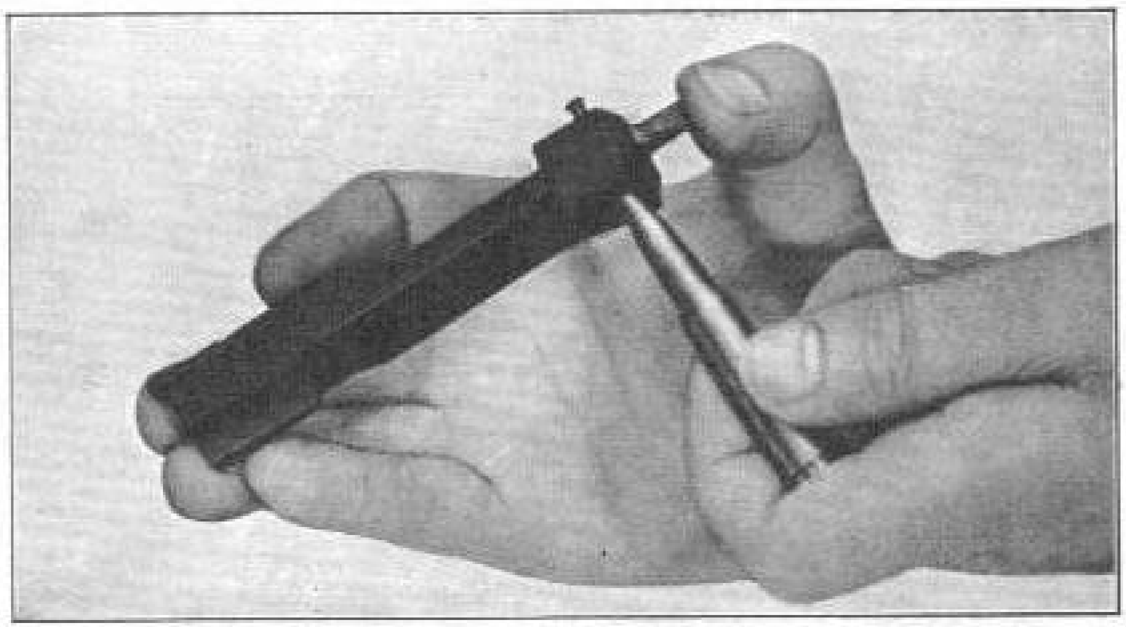


Fig. 40

d) **To remove the firing pin,** press on the rear end of the firing pin, push out the retaining pin; if the pin does not fall out easily, use the nose of a cartridge (fig. 40).

When the retaining pin has been removed, the firing pin will be pushed from its housing by its spring (fig. 41).

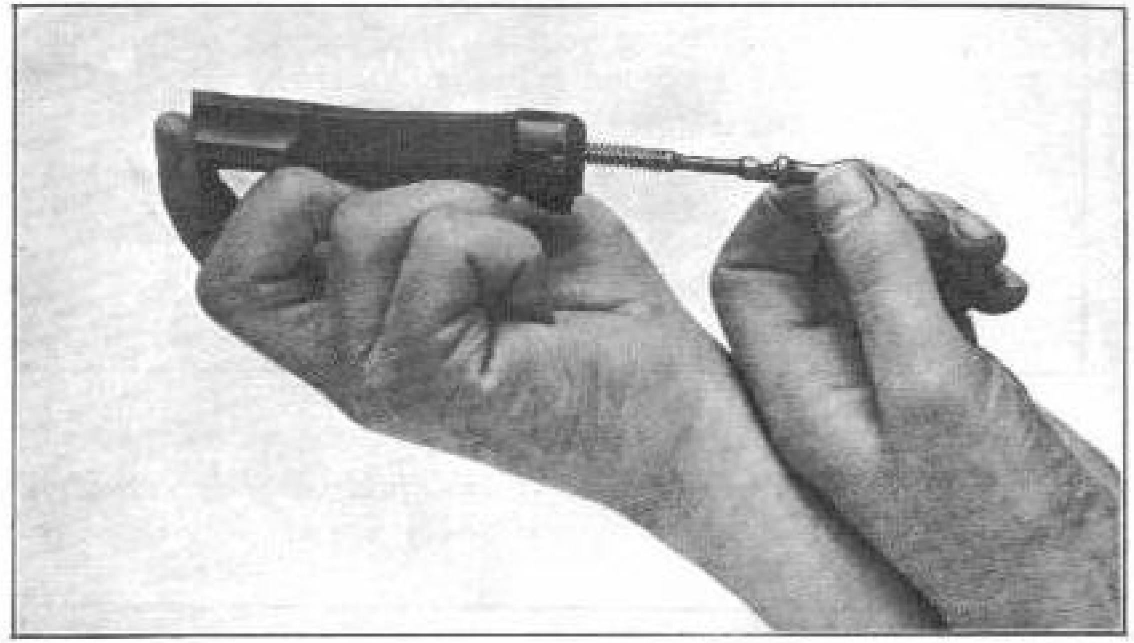


Fig. 41

e) **To remove the gas plug,** press in the plunger (fig. 42) of the gas plug, using the nose of a cartridge, turn gas plug a quarter turn clockwise (fig. 43).

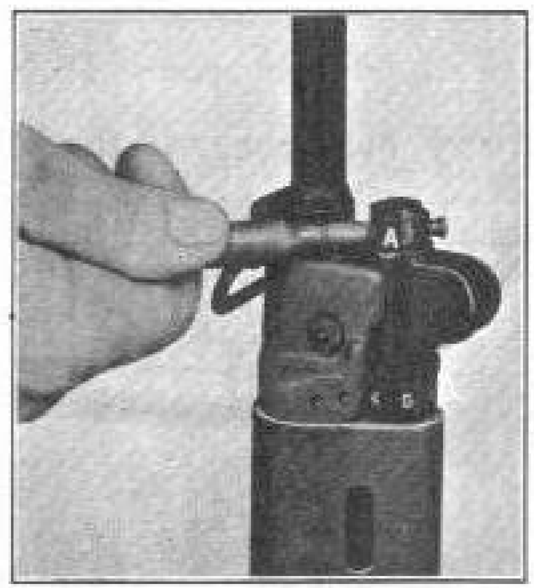


Fig. 42

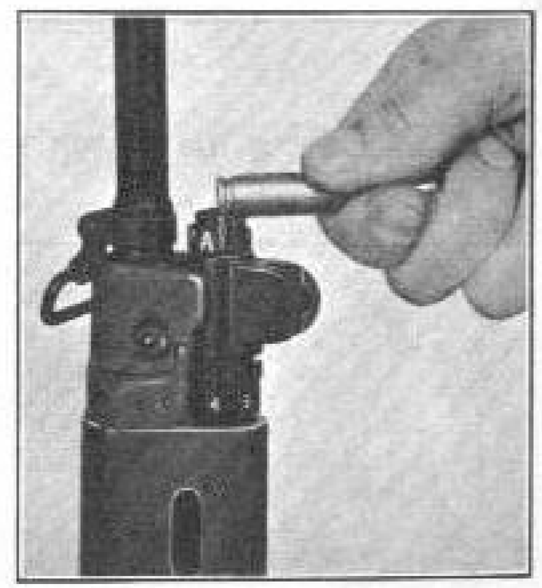


Fig. 43

In this position, the plug will be pushed from its housing by the piston spring (fig. 44).



Fig. 44

f) **Remove the piston** and spring from the gas cylinder (fig. 45).

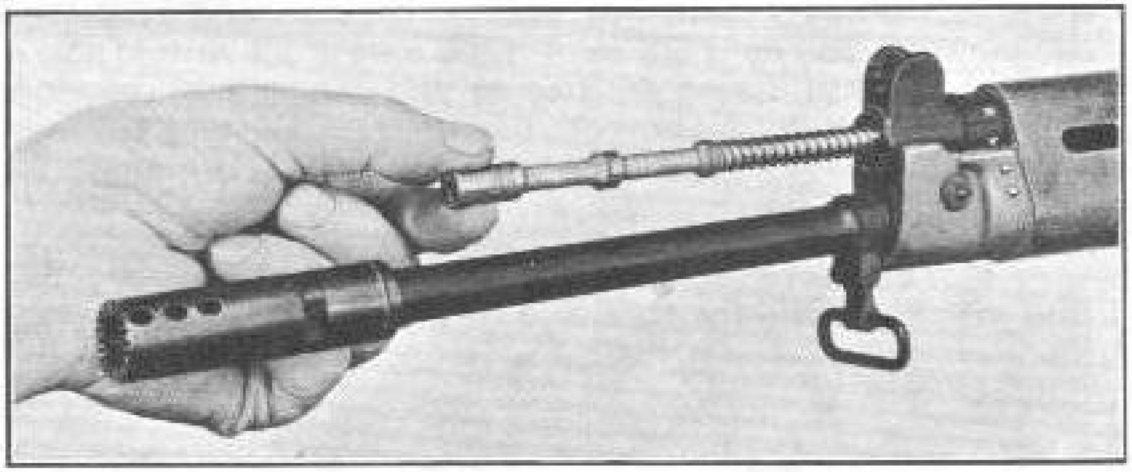


Fig. 45

Separate the piston spring from the piston rod (fig. 46).

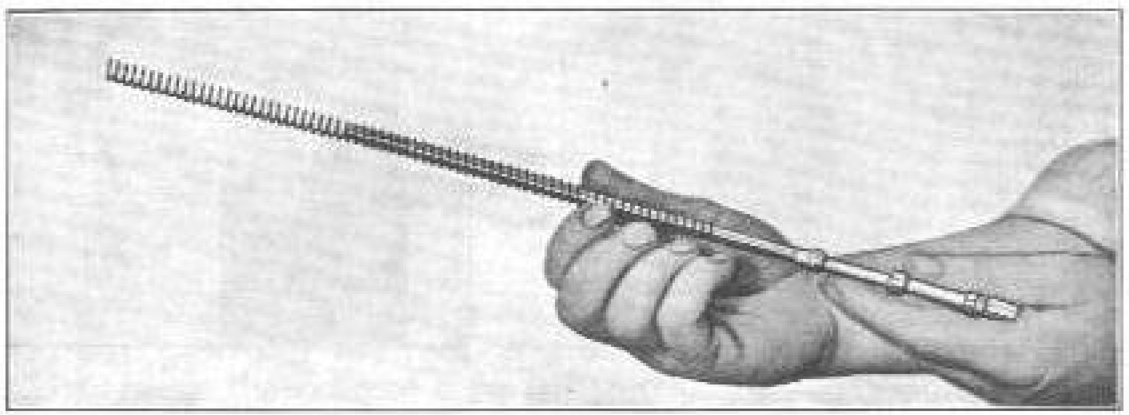


Fig. 46

2. EXTRACTOR

a) To remove the extractor

Press the nose of a cartridge into the plunger hole and compress fully to disengage the extractor from its plunger (fig. 47). Withdraw the extractor from its housing, or let it fall out, still keeping pressure on the extractor plunger.

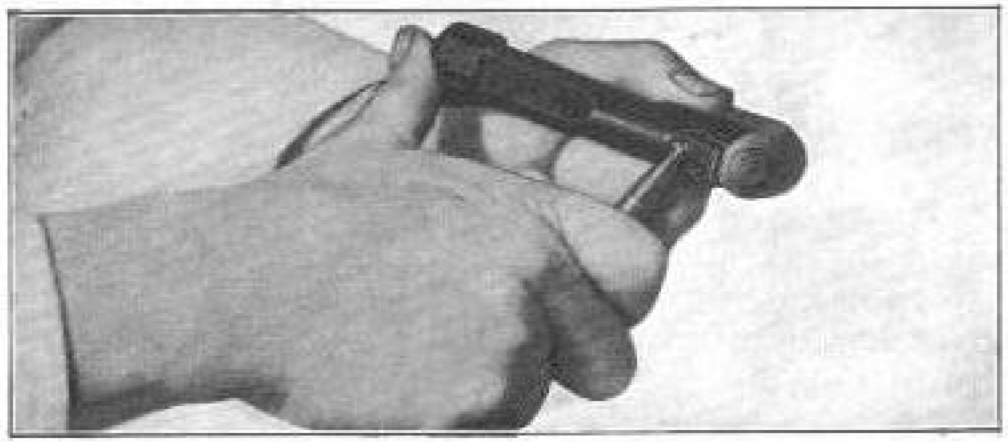


Fig. 47

Note: This operation can also be done with a special tool, which makes stripping quicker and easier (fig. 48). For illustration of tool see page 126.

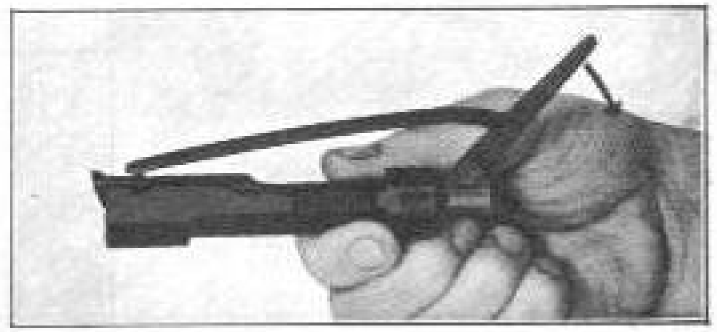


Fig. 48

b) To remove the plunger and spring

After removal of the extractor, gently decompress the extractor spring and withdraw the plunger from its housing as also the spring with its buffer (not to be stripped) (fig. 49).

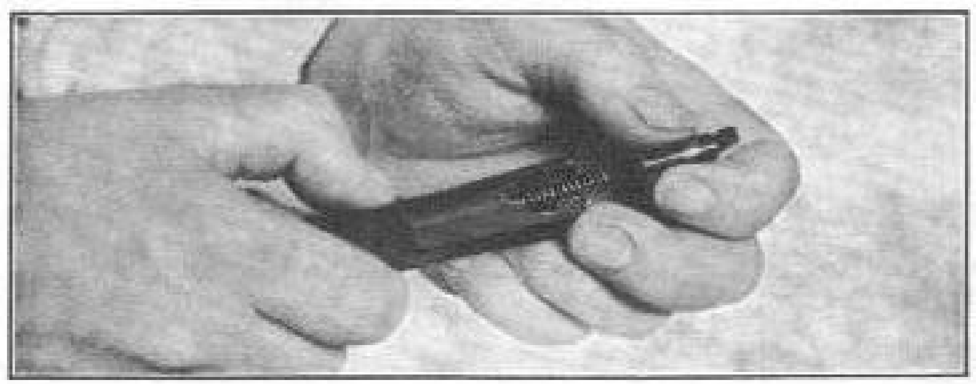


Fig. 49

3. HANDGUARD

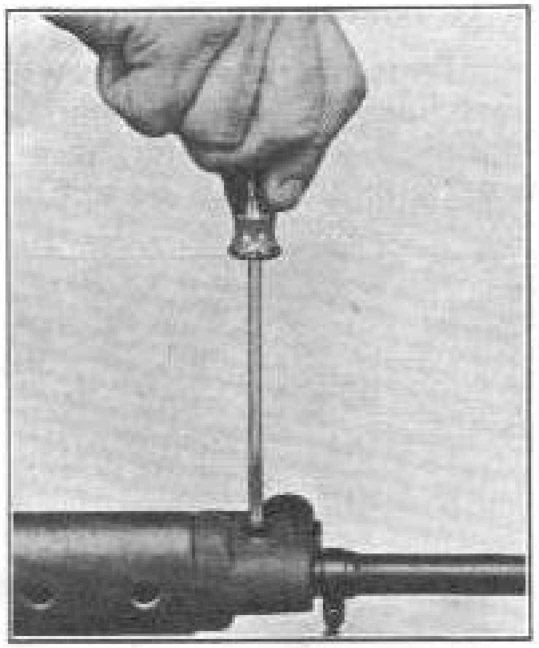


Fig. 50

Unscrew the hand-guard screw ons dis-engage it (fig. 50).

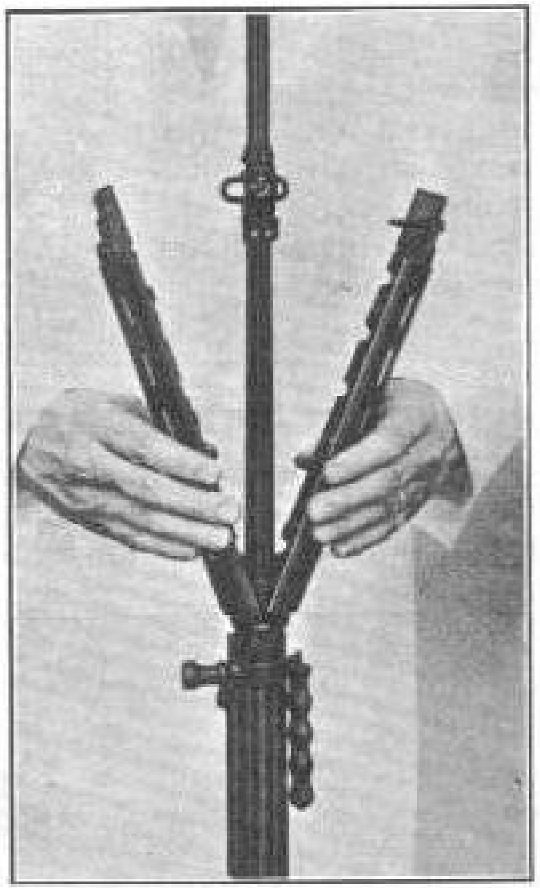


Fig. 51

Separate the two handguard sections, pulling them slightly sideways (fig. 51).

4. CARRYING HANDLE

Remove the handguard (group of operations 3).

Unscrew the nut securing gas tube and carrying handle (fig. 52) and slide it forward.

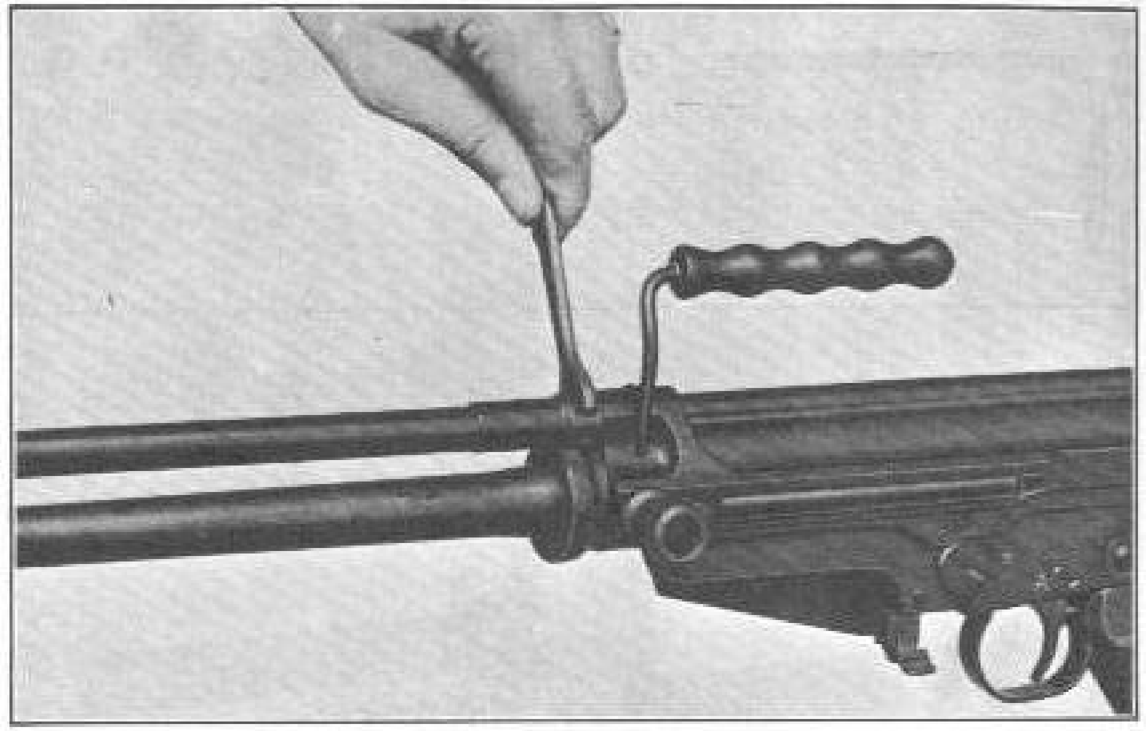


Fig. 52

Withdraw the carrying handle (fig. 53).



Fig. 53

The carrying handle consists of the handle axis, handle, two assembly washers and two spring washers (fig. 54), securing the handle to its axis.

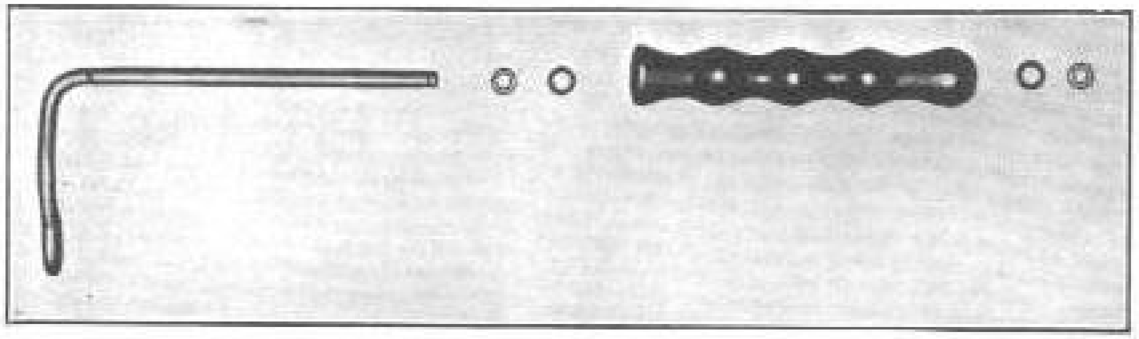


Fig. 54

5. GAS REGULATOR SLEEVE AND GAS CYLINDER

Remove the piston (see group of operations 1).

Remove the handguard (see group of operations 3).

a) **Gas regulator sleeve**

Using the spanner, completely unscrew the regulator sleeve (fig. 55) and pull it to the rear to keep it free of its spring.

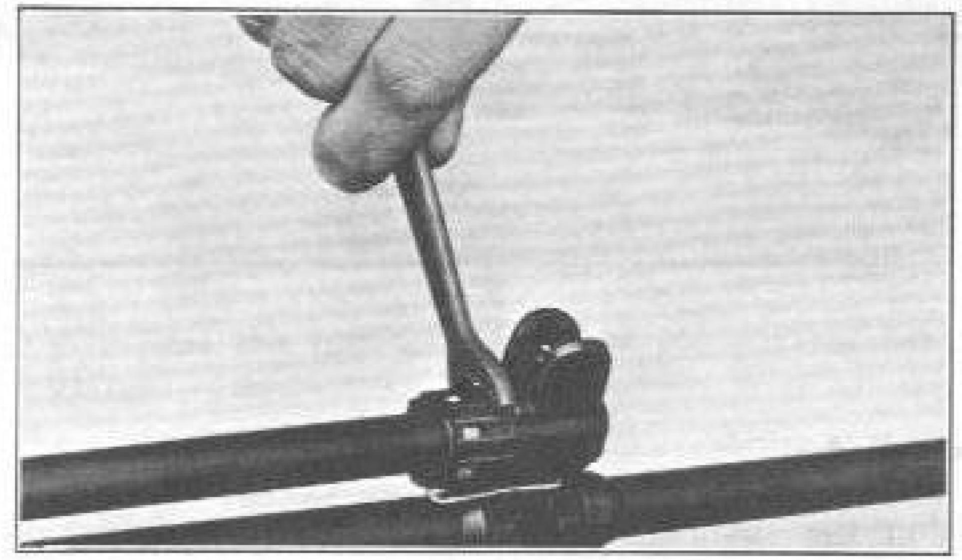


Fig. 55

Use a screwdriver to release the spring from the two spring seatings recessed in the gas block (fig. 56).



Fig. 56

Withdraw the spring to the rear (fig. 57).

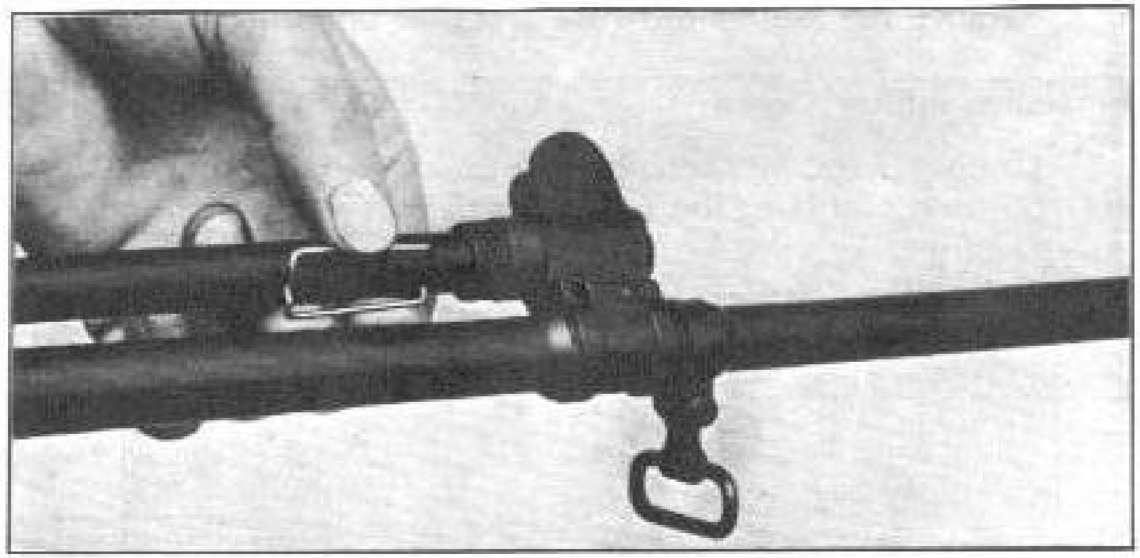


Fig. 57

b) **Gas cylinder**

Using the spanner, completely unscrew the gas cylinder bush (fig. 58) and move it forward.

Remove the gas cylinder retaining pin (fig. 59).

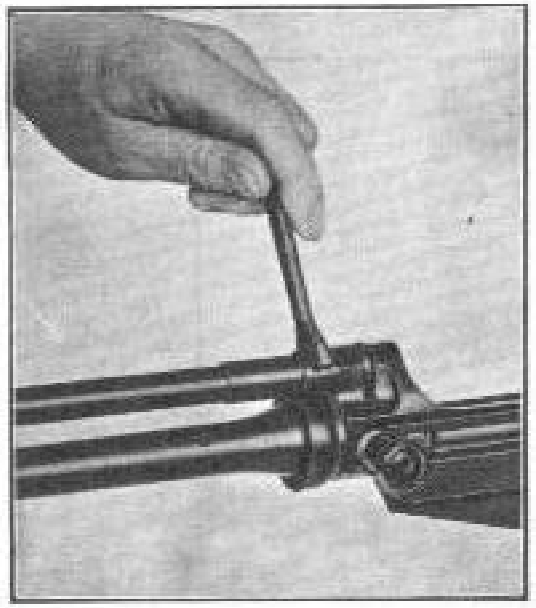


Fig. 58

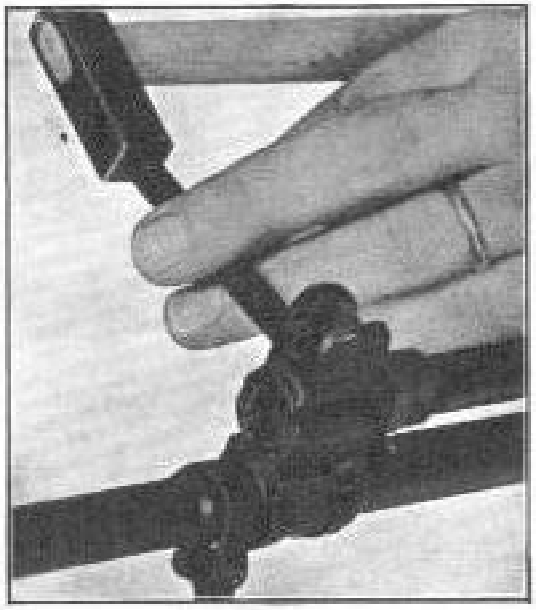


Fig. 59

Unscrew the gas cylinder and withdraw it to the rear (fig. 60).

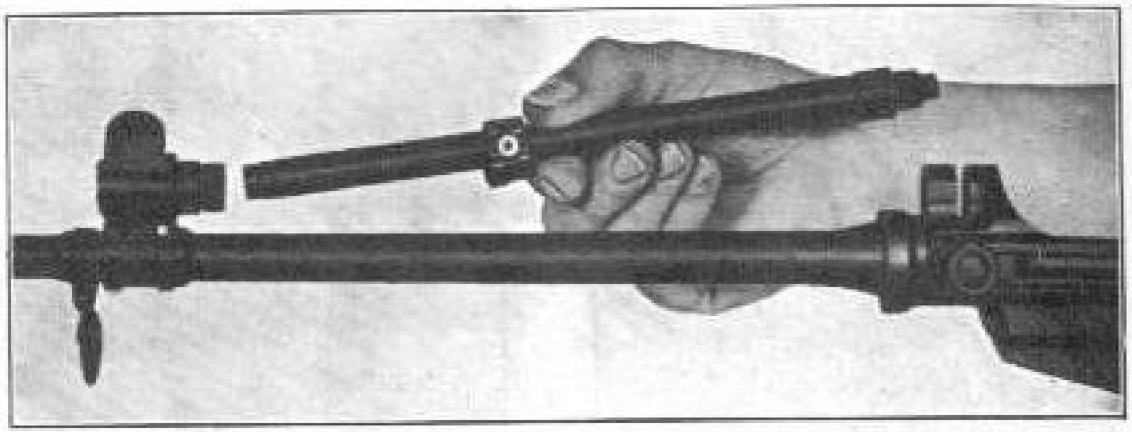


Fig. 60

Withdraw the gas tube nut and the gas regulator sleeve (fig. 61).

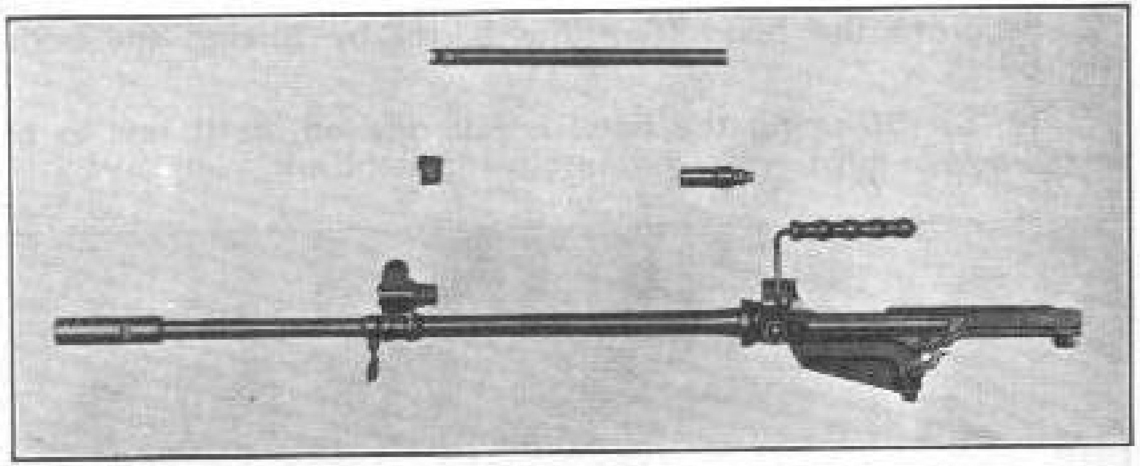


Fig. 61

6. FRONT SLING SWIVEL

Unscrew the front swivel screw (fig. 62) to release the sling swivel from its band (fig. 63).

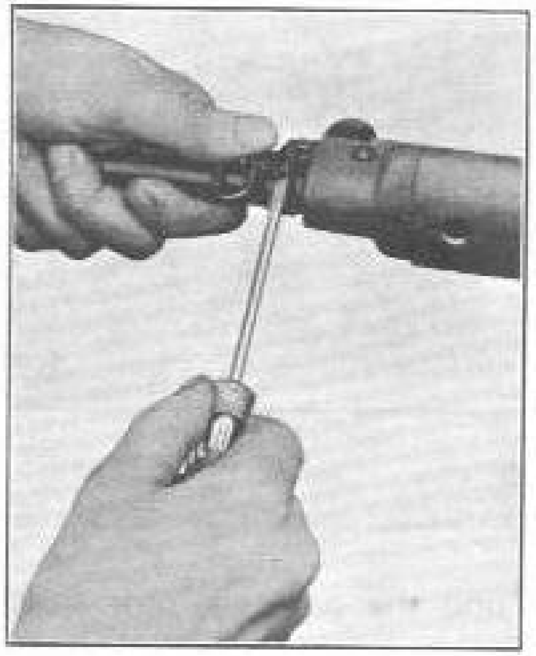


Fig. 62

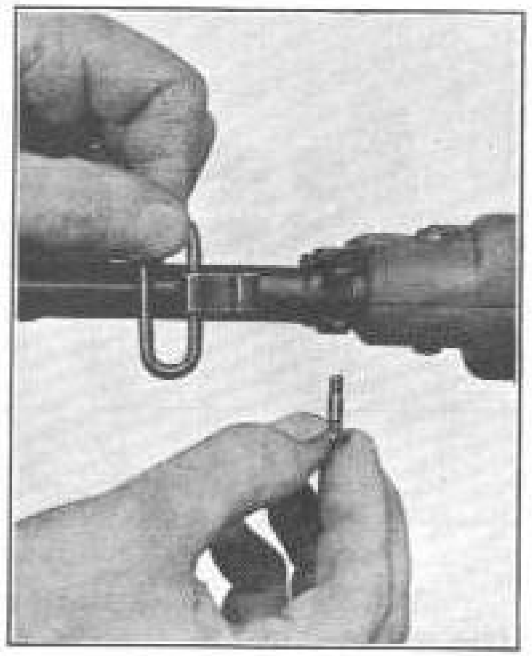


Fig. 63

Separate the band from the barrel by forcing the band (fig. 64).

N. B. Stripping the band is not advised, as it has to be forced open.

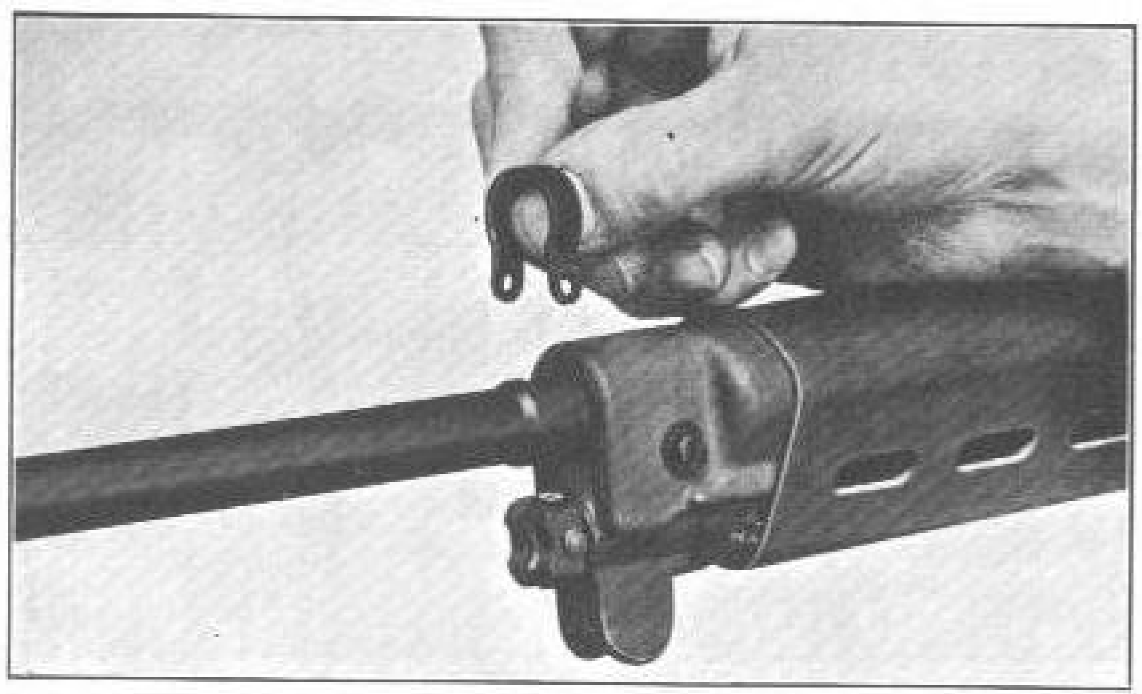


Fig. 64

7. FORESIGHT

Before removing the foresight, screw in completely, counting the number of clicks, so that the correct elevation can be obtained when it is replaced.

Unscrew the foresight with the special key (fig. 65).

Remove the foresight (fig. 66).

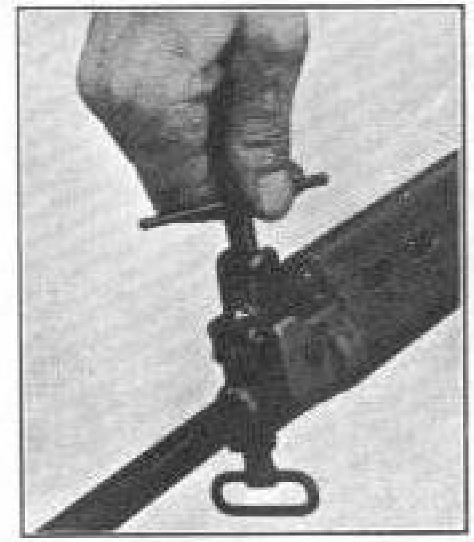


Fig. 65



Fig. 66

Withdraw the foresight plate and spring from their housing (fig. 67).

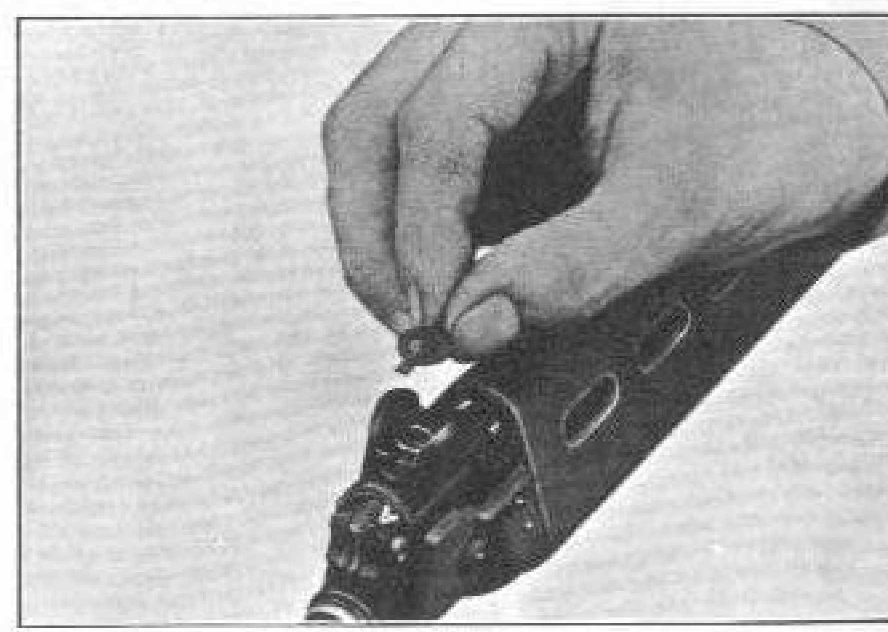


Fig. 67

8. JOINT PIN, TRIGGER FRAME-BODY

Field strip the weapon (group of operations 1).

Swing the rifle open as far as it will go. Unscrew the retainer pin of the joint pin, using a coin or a screwdriver (fig. 68).



Fig. 68



Fig. 69

Remove the retainer pin (fig. 69).

Insert the nose of a cartridge in the centre recess of the joint pin and push. The joint pin will then be pushed out about 1 cm (fig. 70).

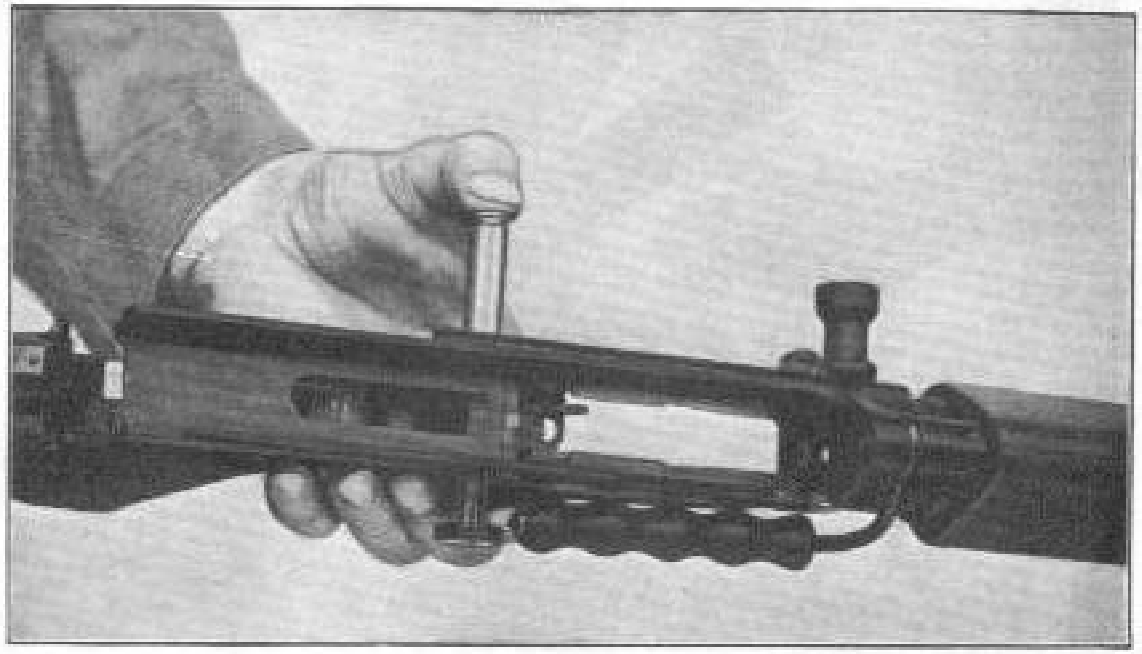


Fig. 70

Remove the joint pin (fig. 71).



Fig. 71

With the joint pin removed, the butt-trigger group is separated from the body-barrel group (fig. 72).

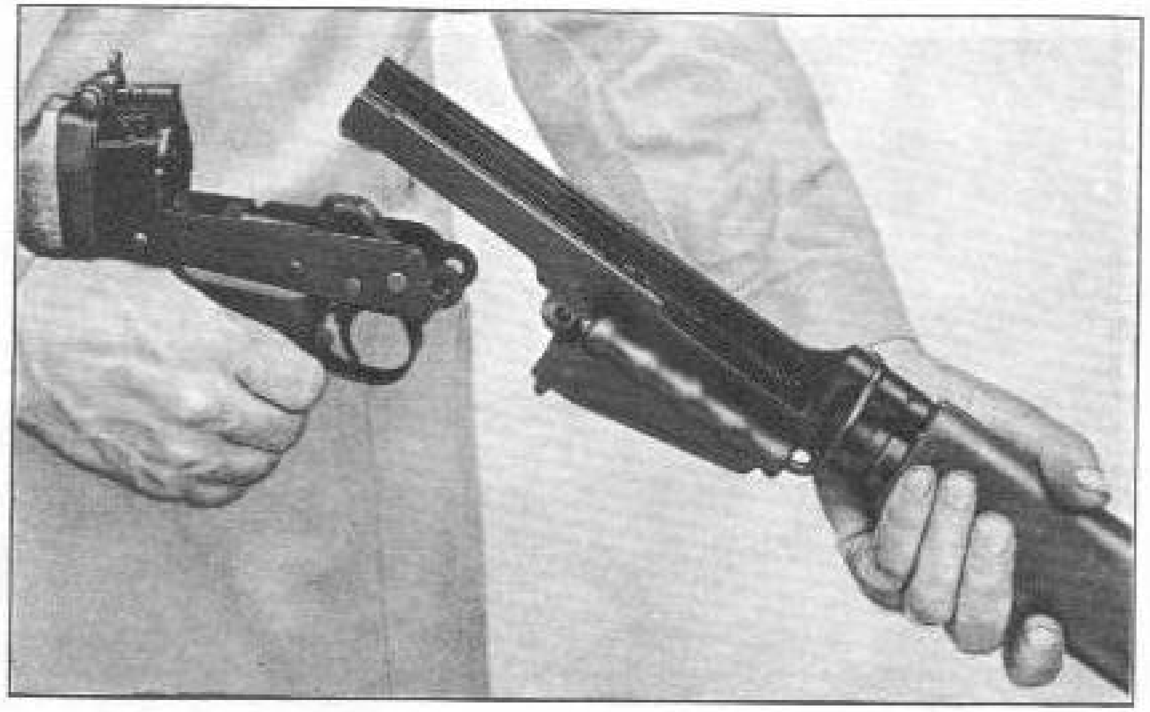


Fig. 72

9. SAFETY SEAR

Field strip the weapon (group of operations 1).

Strip the joint pin frame-body (group of operations 8).

Rotate the safety sear approx. 90° pulling it gently to the rear (fig. 73) until it is clear of the body.

N. B. — The sear spring is riveted and should not be stripped.

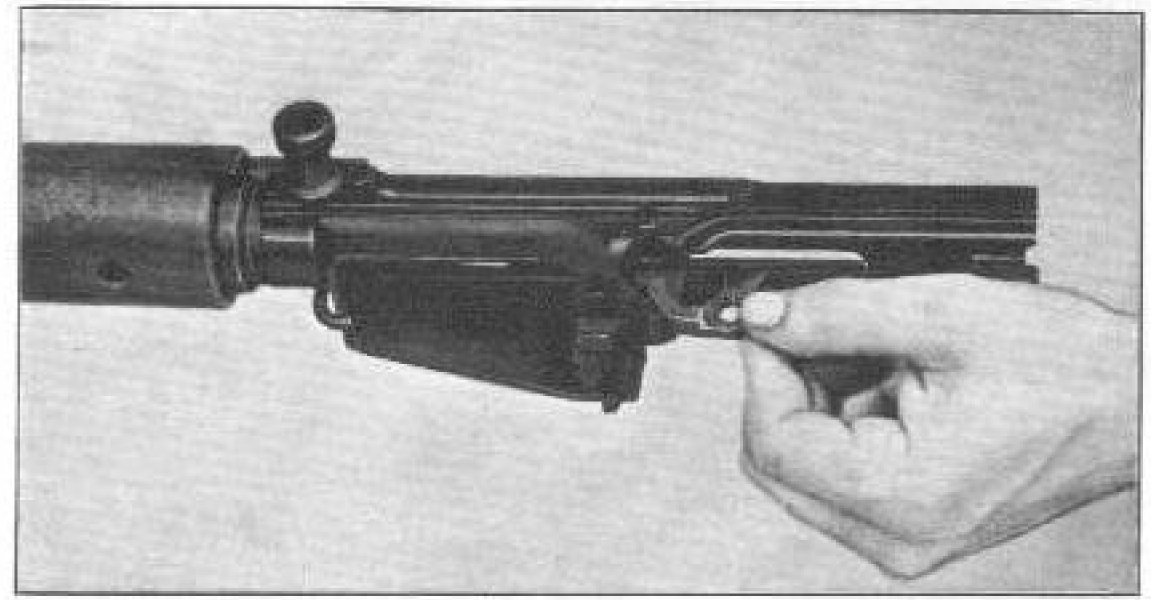


Fig. 73

10. COCKING HANDLE

Field strip the weapon (group of operations 1).

Using a pin drift, remove the lug retaining pin (fig. 74).

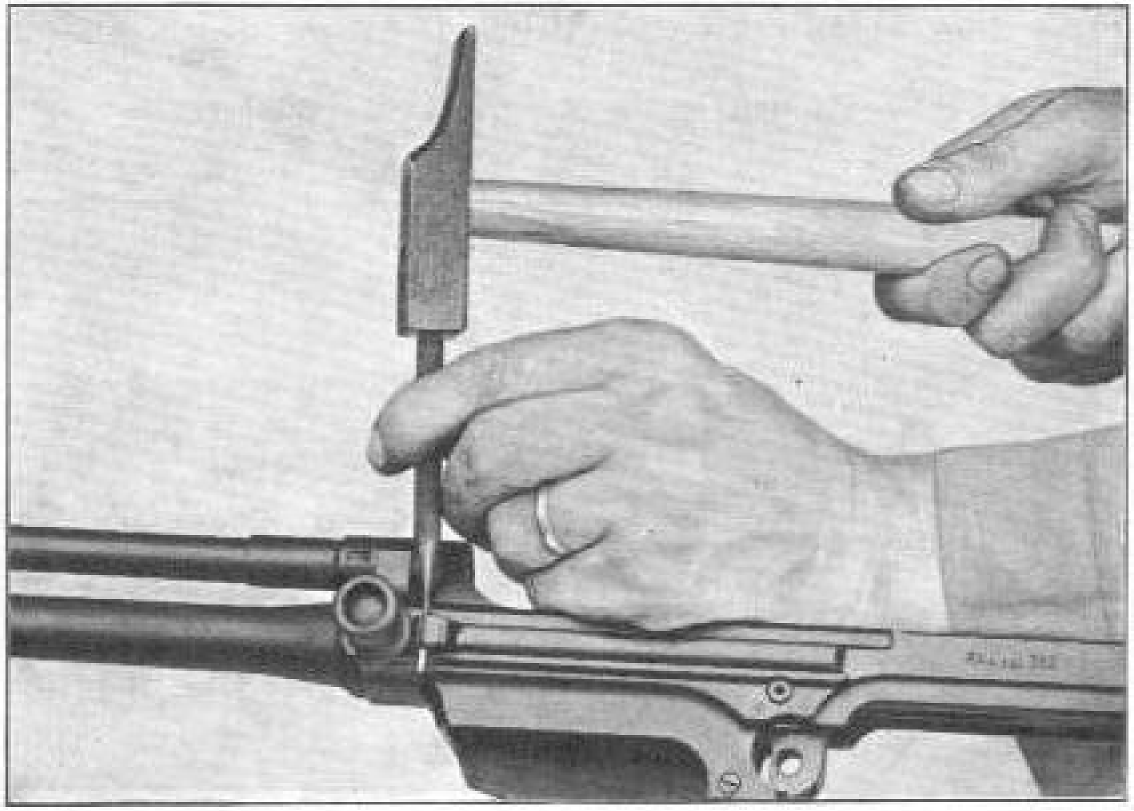


Fig. 74

Remove the lug (fig. 75). If this is rather tight, use a pin drift to push it out, from the inside of the rifle outwards.

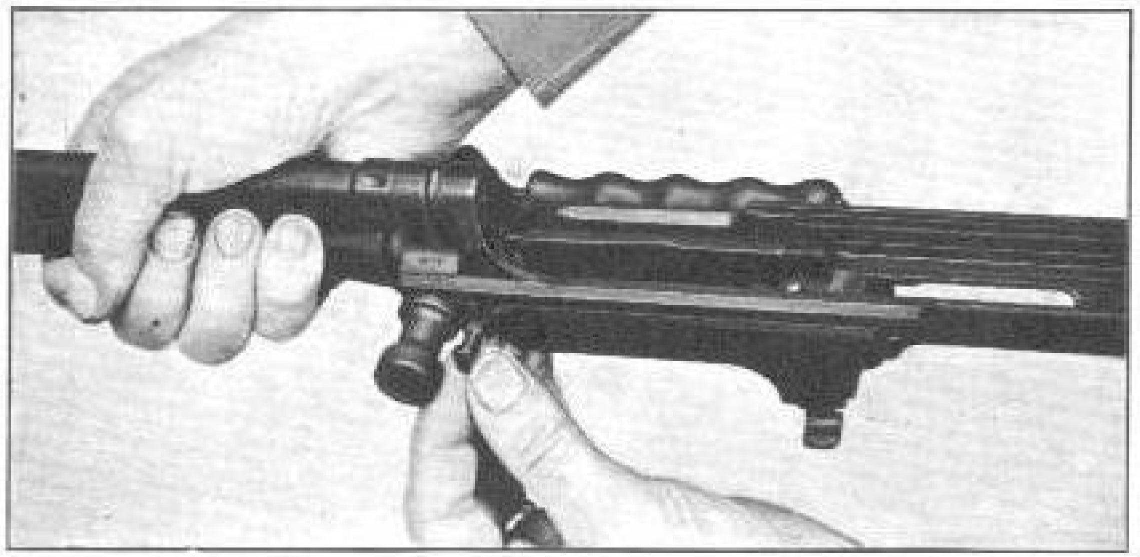


Fig. 75

Pull the cocking handle slide to its rear position, then exert a backwards pull on the handle and, at the same time, depress the lug of the cocking handle slide with a pin drift, or the slide rod (fig. 76), until the cocking handle moves freely to the rear.

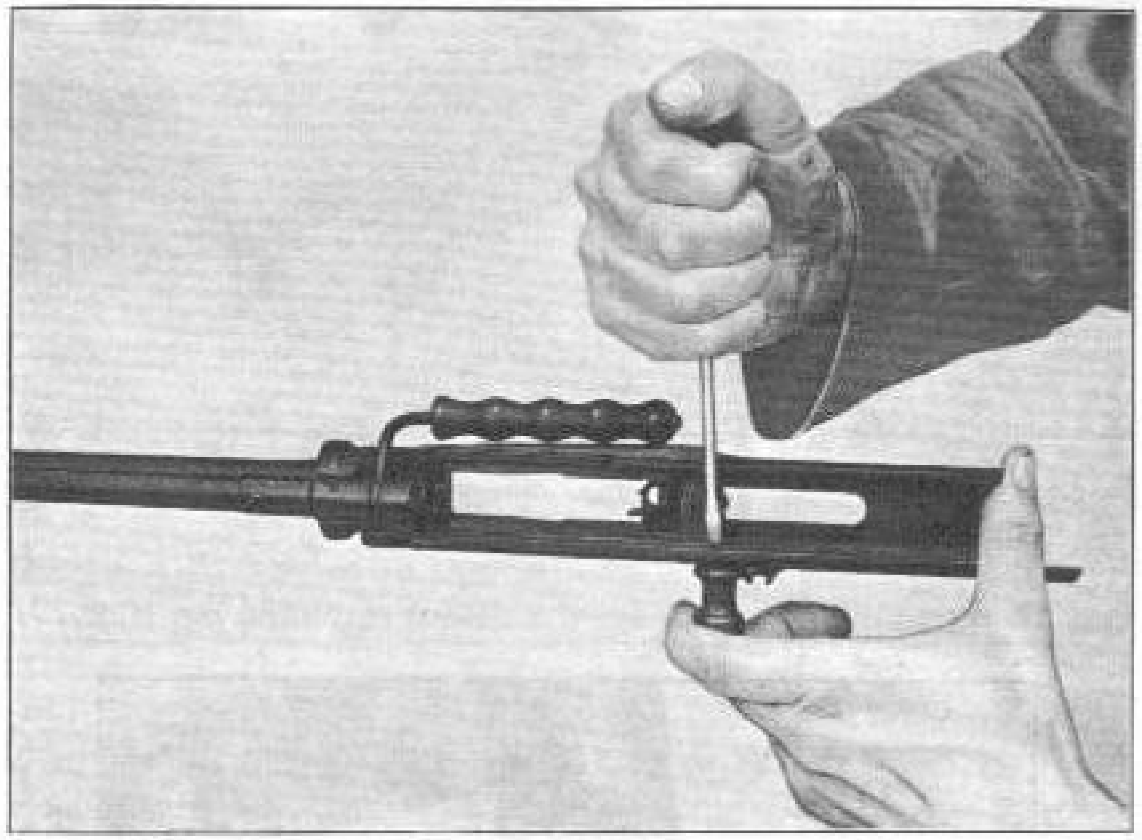


Fig. 76

Withdraw the handle completely towards the rear (fig. 77).

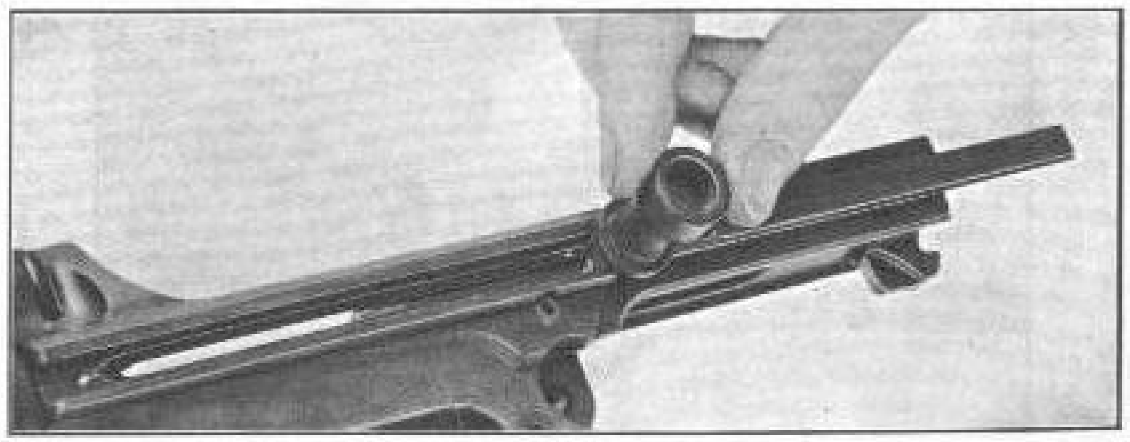


Fig. 77

N. B. — If the handguard has already been stripped (group of operations 3), after removing the cocking handle knob (fig. 74 and 75), it is only necessary to pull the handle forward to remove (fig. 78).



Fig. 78

Using a pin drift, push out the detent retaining pin (fig. 79)

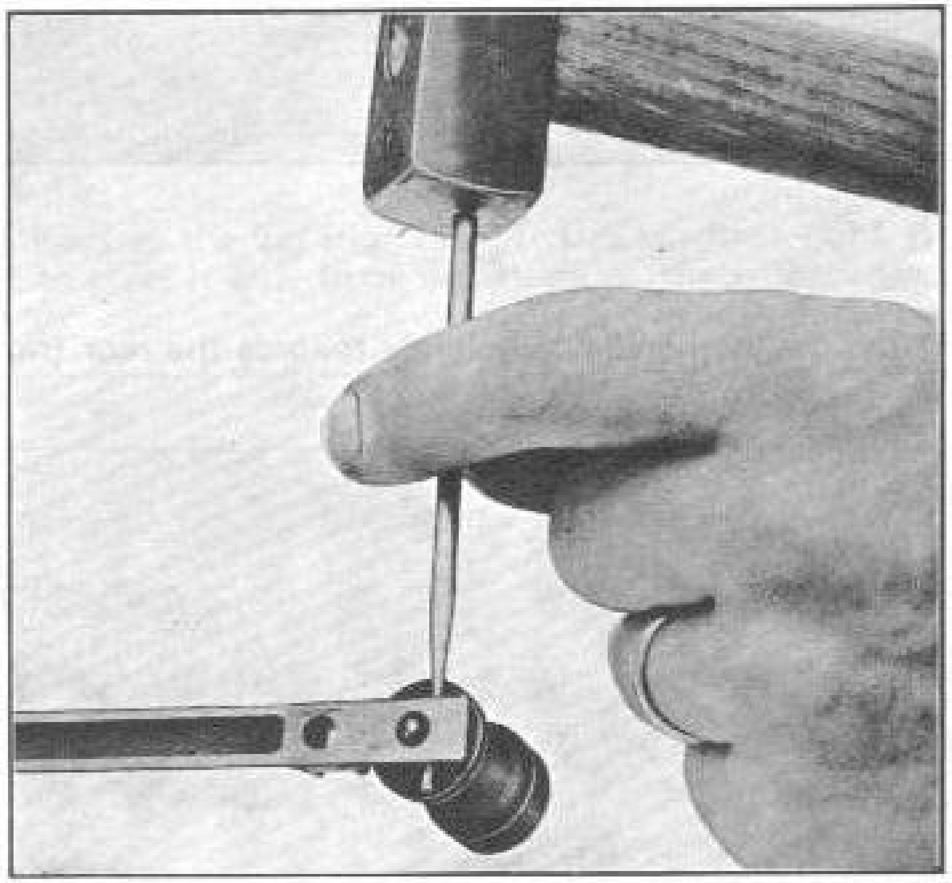


Fig. 79

The cocking handle detent and its spring are then freed (fig. 80).

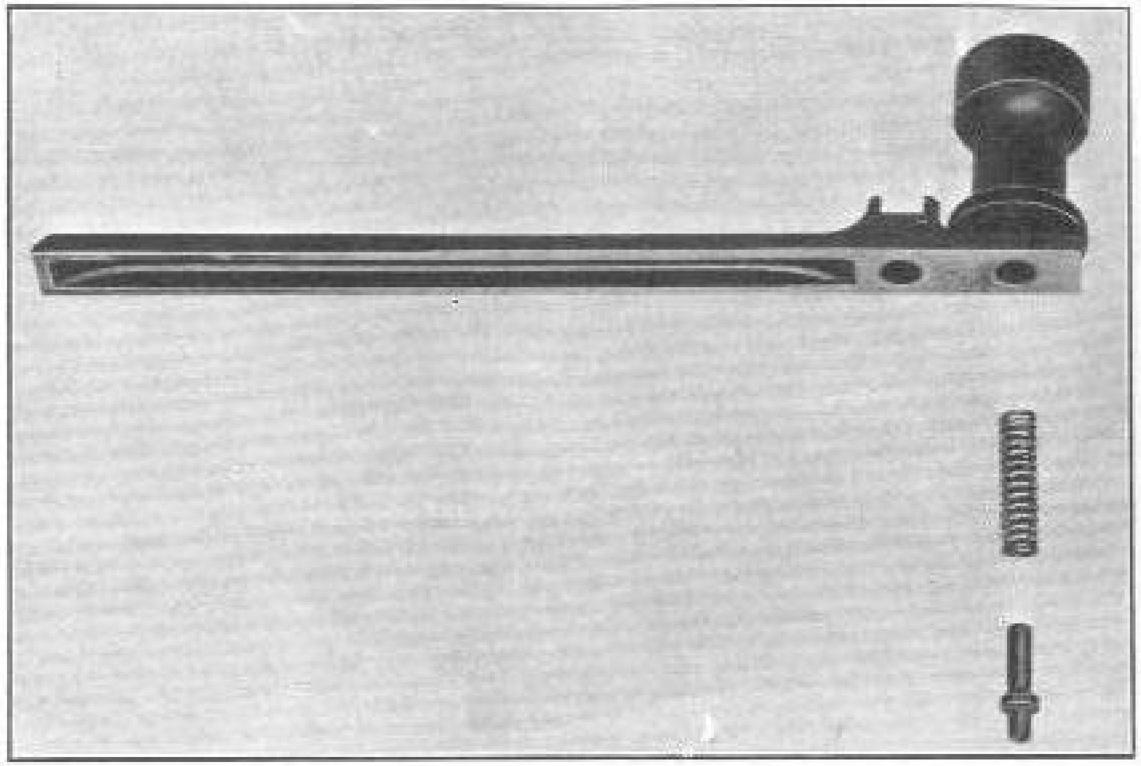


Fig. 80

11. MAGAZINE CATCH AND HOLDING OPEN DEVICE

Field strip the rifle (group of operations 1).

Unscrew the magazine catch axis pin (fig. 81).

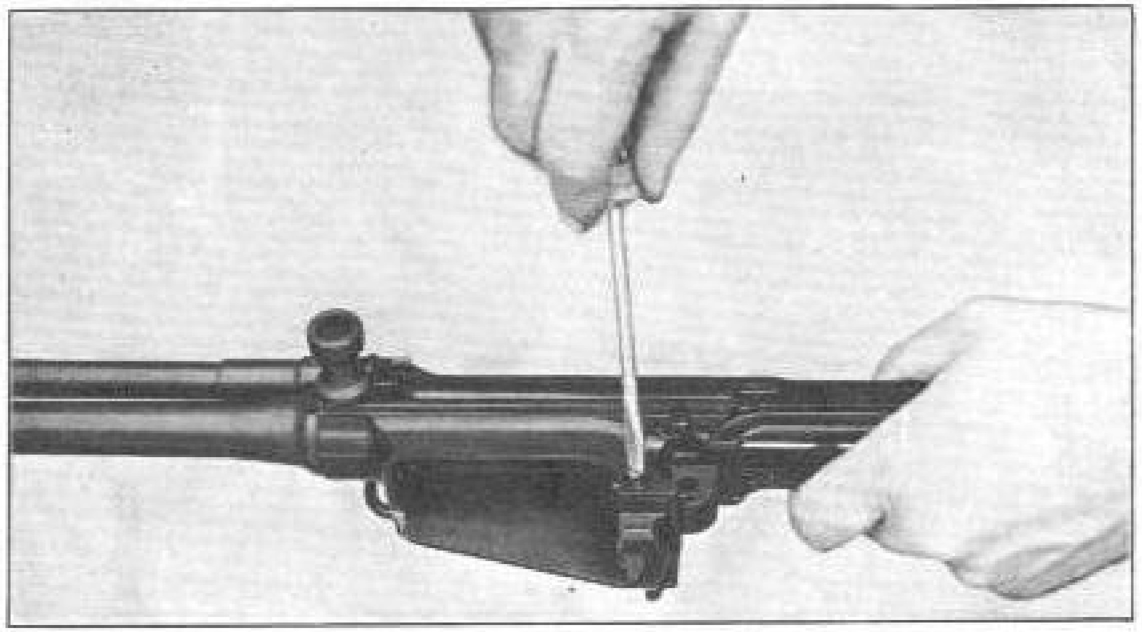


Fig. 81

Remove the magazine catch axis pin (fig. 82).

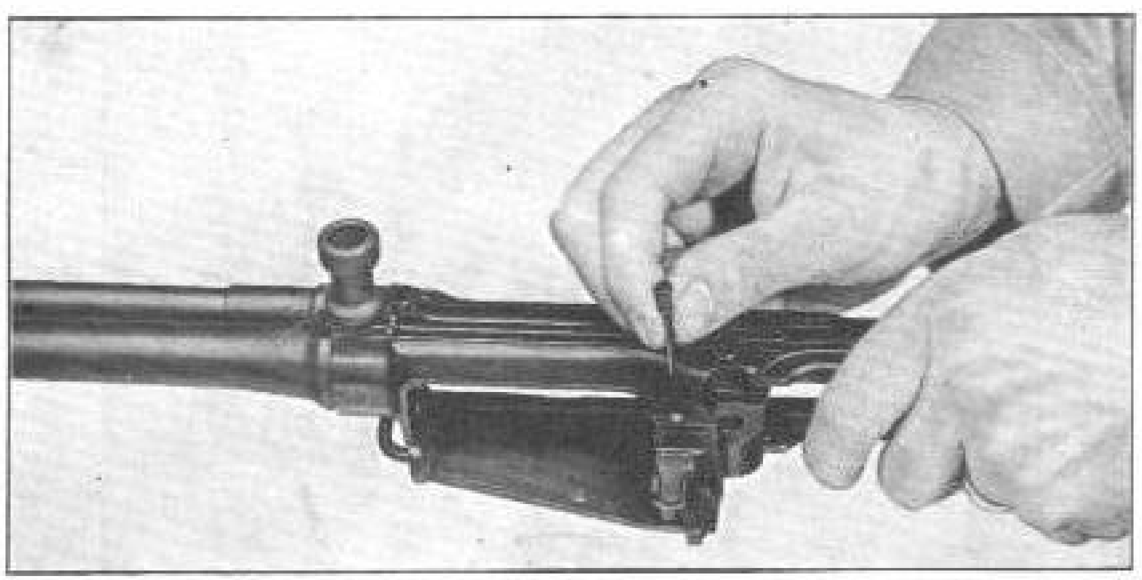


Fig. 82

a) **Magazine catch.** — Use the blade of a screwdriver to compress the magazine catch spring, at the same time pulling the magazine catch (fig. 83).

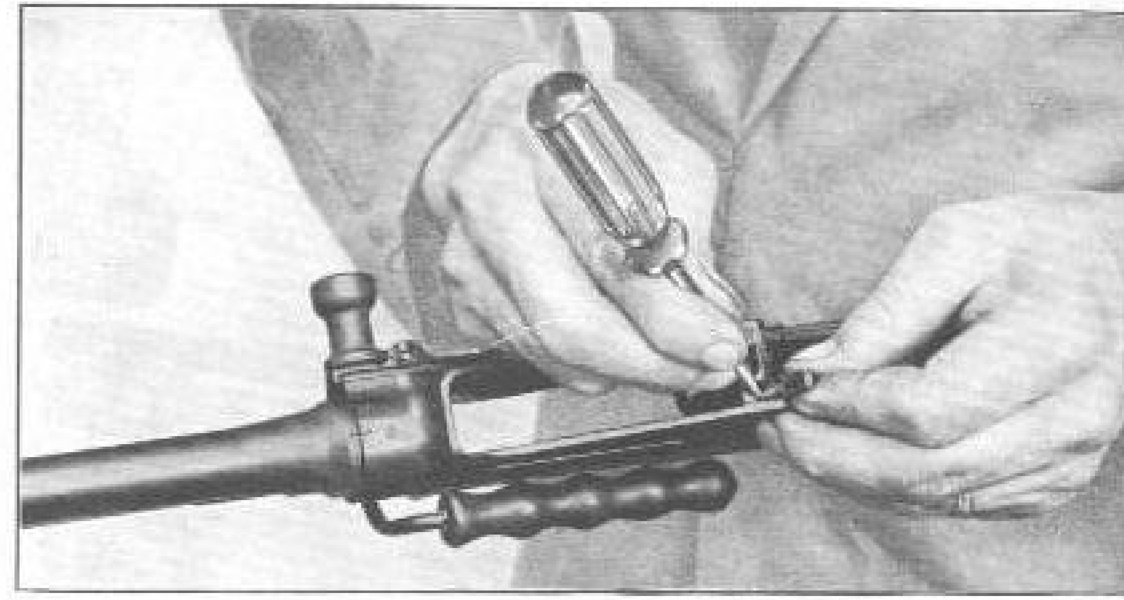


Fig. 83

When the spring is freed from its housing in the body, remove the magazine catch (fig. 84).

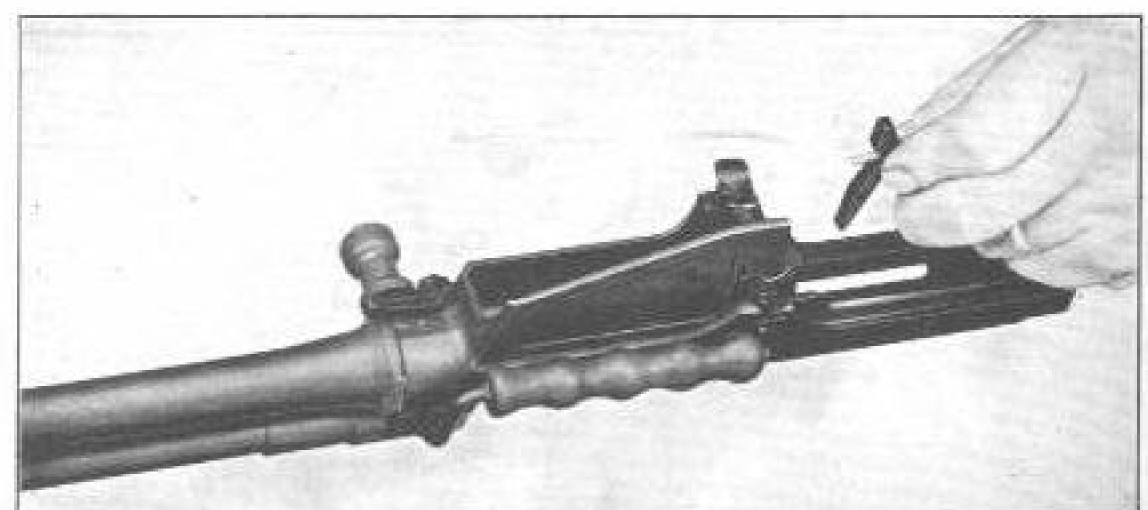


Fig. 84

b) **Holding open device.** — Grasp the holding open device and remove from its housing (fig. 85).

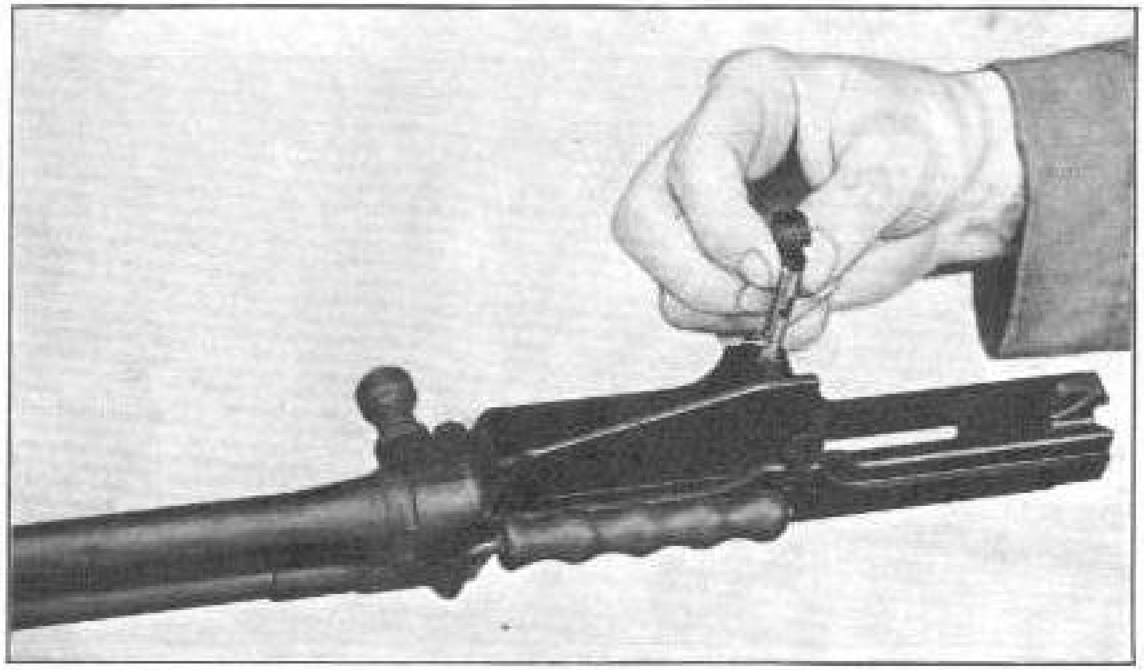


Fig. 85

12. LOCKING SHOULDER

Field strip the rifle (group of operations 1).

Push the locking shoulder outwards from left to right, using a drift (fig. 86).

N. B. — The locking shoulder is only removed when the headspace needs to be adjusted.

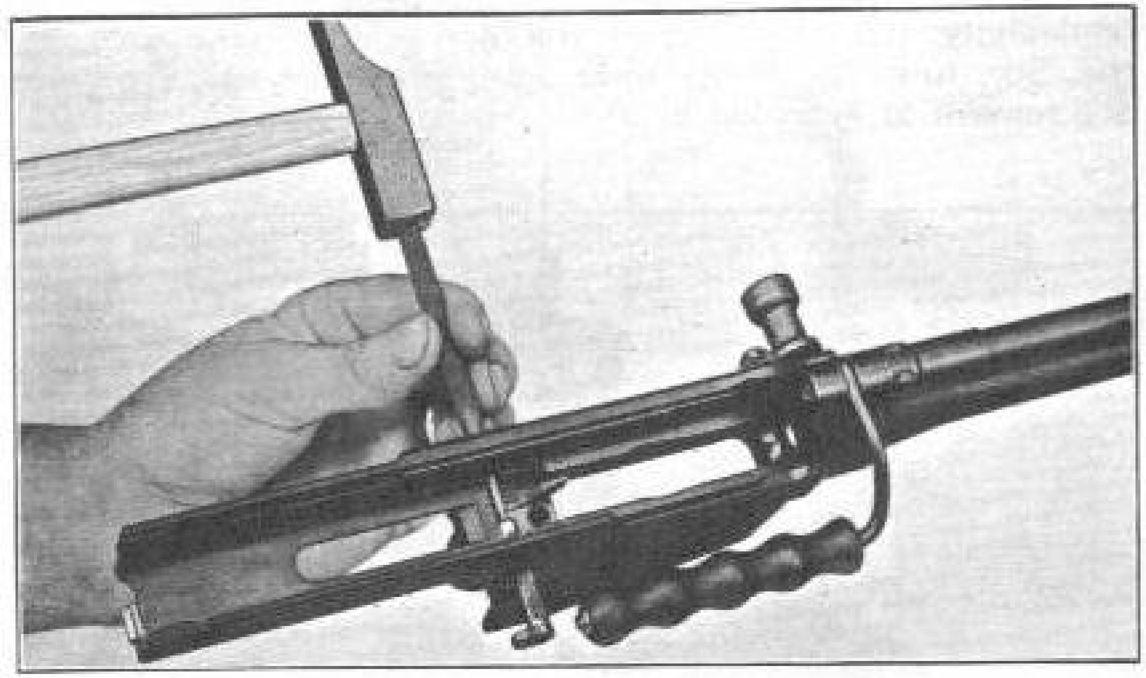


Fig. 86

Withdraw the locking shoulder (fig. 87).

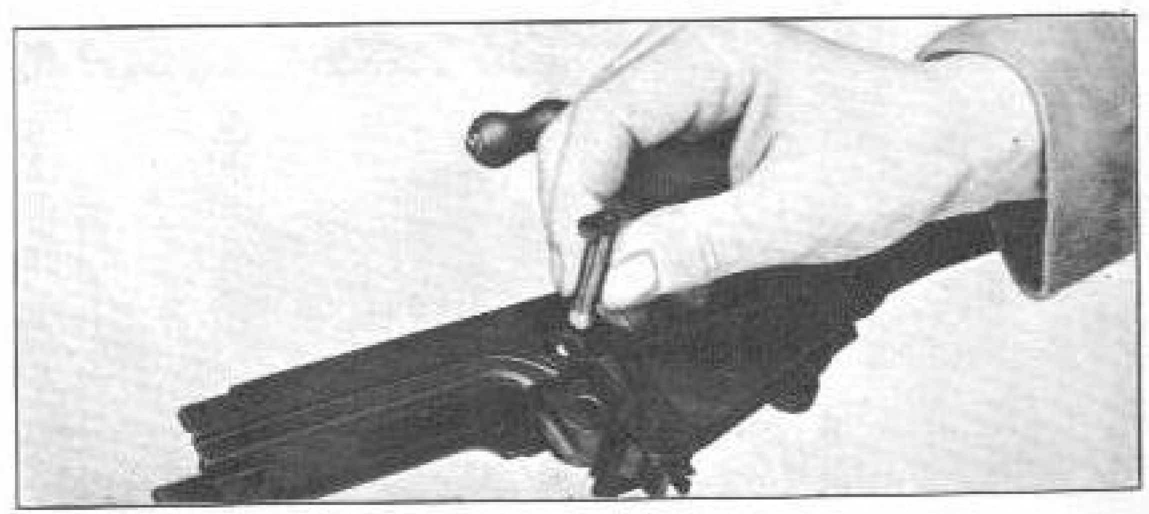


Fig. 87

13. TRIGGER MECHANISM AND PISTOL GRIP

Field strip the rifle (group of operations 1).

Strip the joint pin, frame-body (group of operations 8).

a) **Change lever.** — Turn the change lever upwards until it reaches its vertical position, then remove it (fig. 88).

N. B. — The change lever can also be removed without any preliminary stripping. Open the gun as for field stripping (fig. 36), turn the change lever upwards to its vertical position and remove as indicated at a).



Fig. 88

Push out the change lever pin (fig. 89).

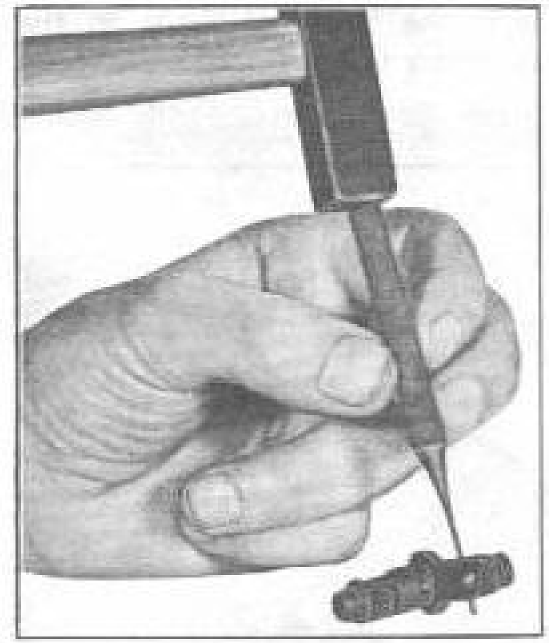


Fig. 89

This releases the change lever spring and its index stud (fig. 90).

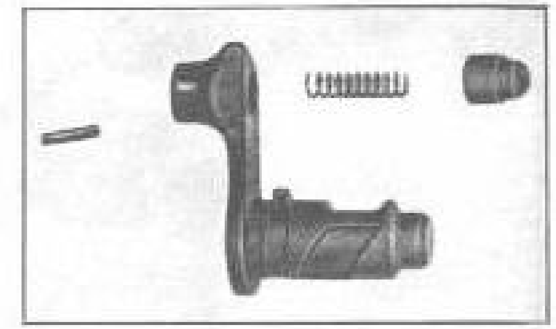


Fig. 90

b) **Hammer.** — Control the hammer with thumb and press the trigger, allowing the hammer to return gently to its forward position (fig. 91).

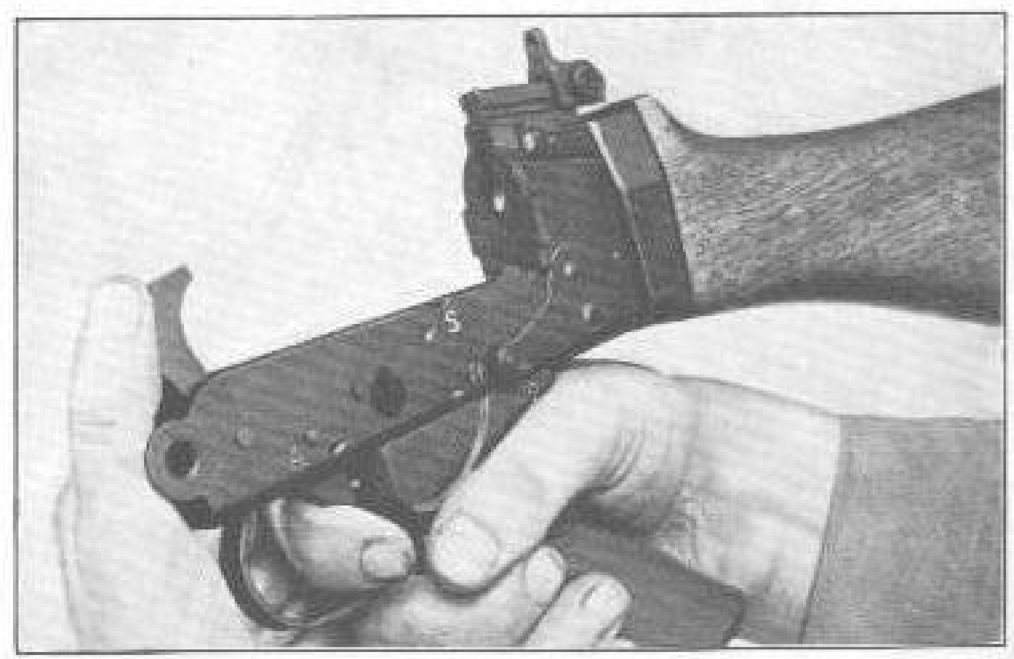


Fig. 91

Insert the nose of a cartridge underneath the hammer spring housing in the notch provided for this purpose in the left side of the trigger frame, and lever upwards to release the housing from its notch; during this operation, keep the thumb lightly on the housing to prevent it from flying out under action of the hammer spring (fig. 92).

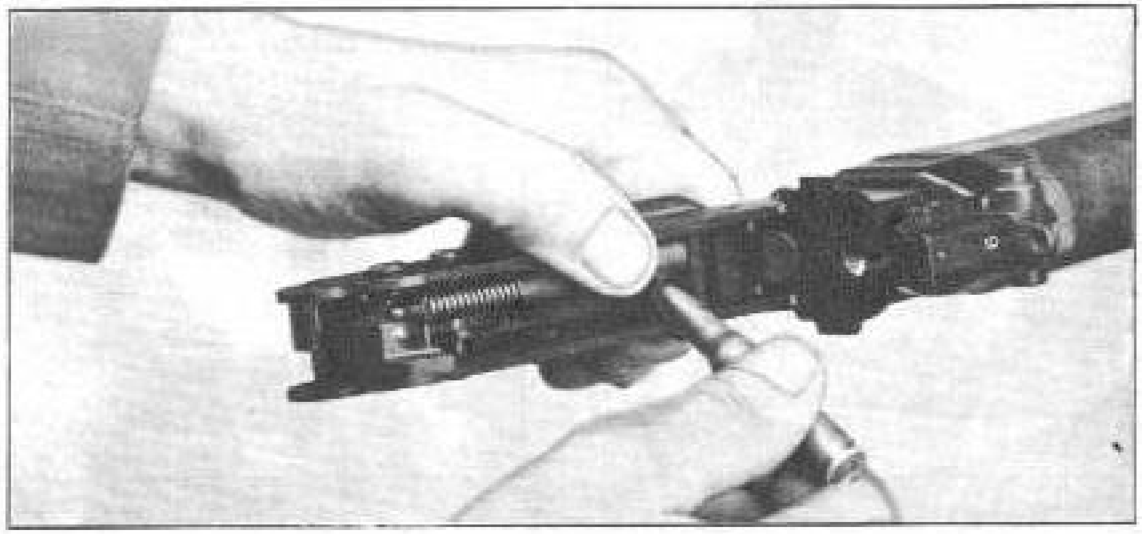


Fig. 92

Remove the assembly of spring rod, housing and hammer spring (fig. 93).



Fig. 93

Pull apart the hammer spring housing, spring rod and spring (fig. 94).

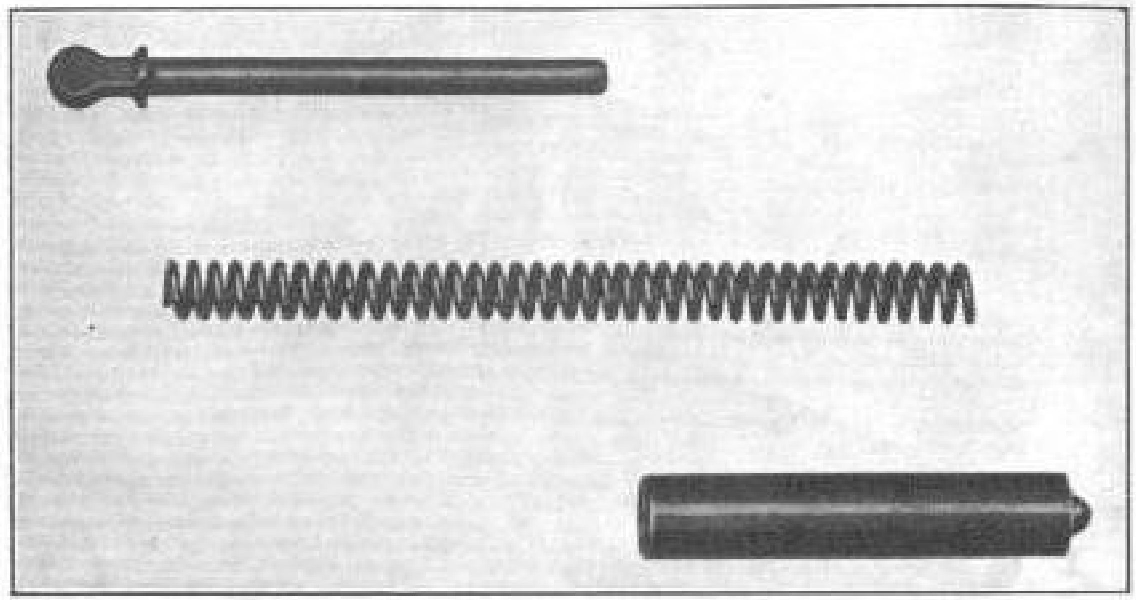


Fig. 94

Lift the locking plate for hammer axis pin upwards as far as it will go and remove backwards (fig. 95).



Fig. 95

Use the nose of a cartridge to push out the hammer axis pin (fig. 96).

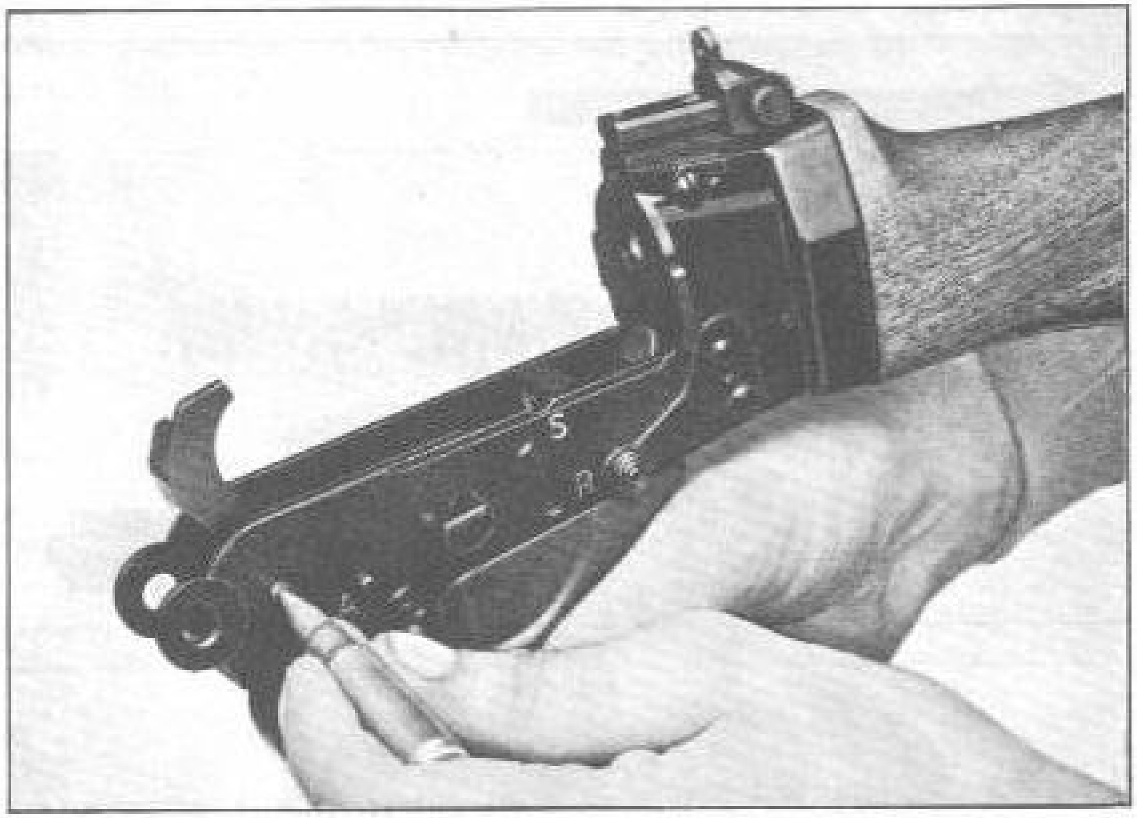


Fig. 96

Remove hammer pin and hammer (fig. 97).

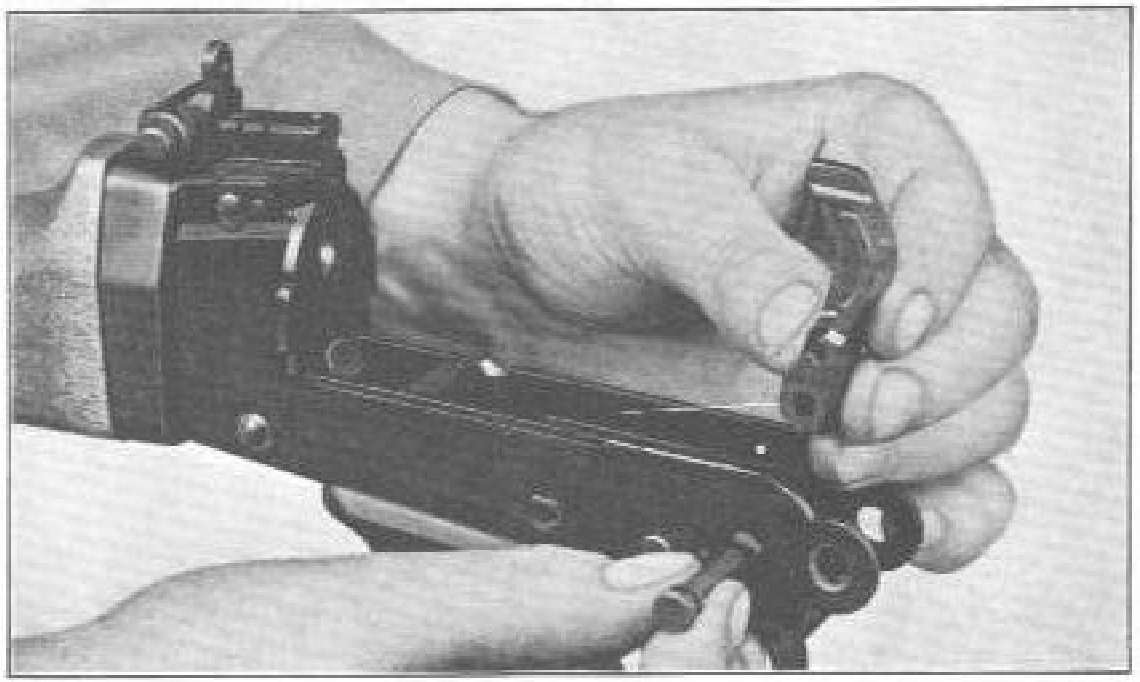


Fig. 97

c) **Sear.** — Use the nose of a cartridge to push the sear axis pin out of its housing (fig. 98).



Fig. 98

Hold the sear with the left hand to prevent it from flying out under the action of its spring and pull out the axis pin (fig. 99).

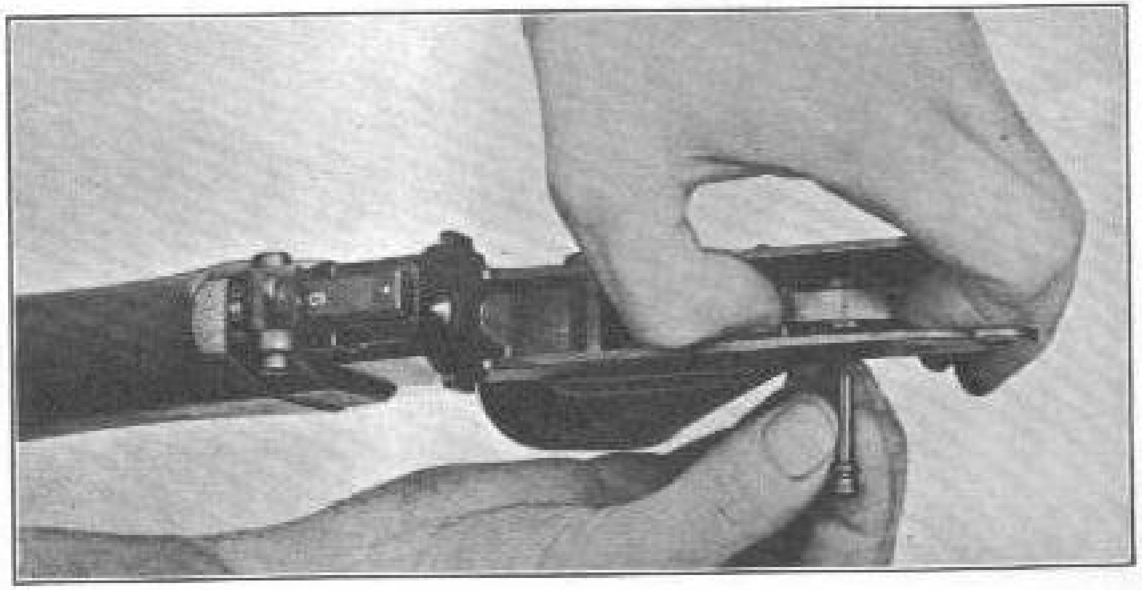


Fig. 99

Remove the sear (fig. 100).



Fig. 100

d) **Trigger.** — Remove the trigger, releasing it from the trigger plunger (fig. 101).

The last spiral of the sear spring is open and can be extracted

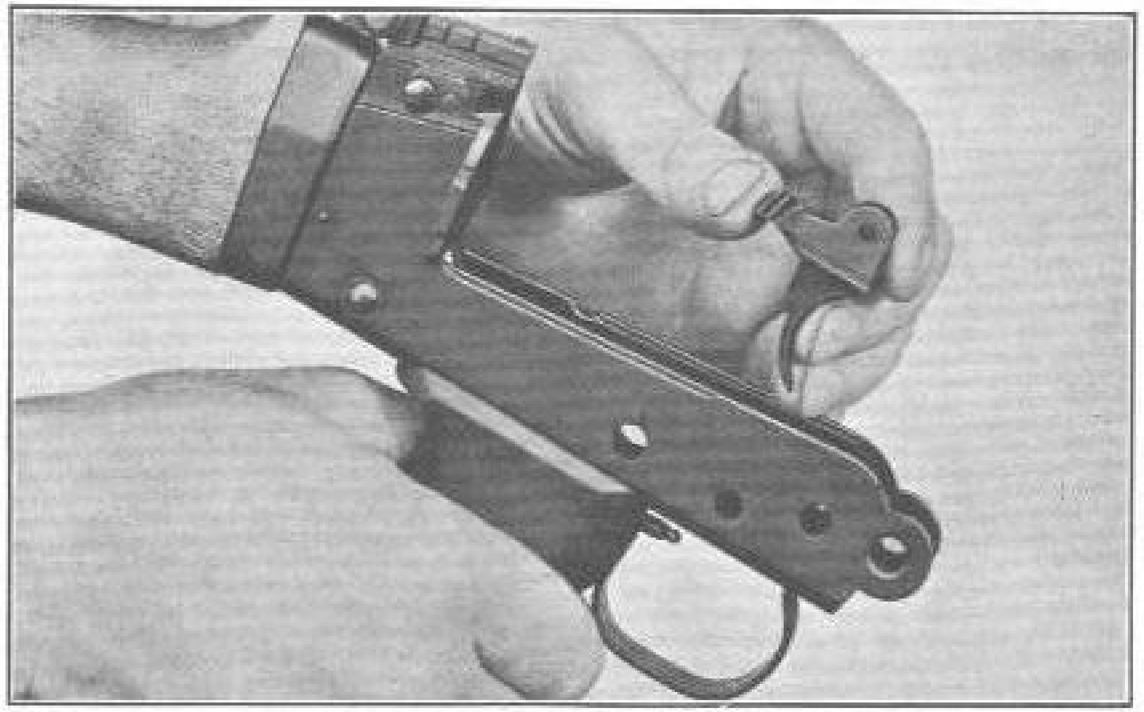


Fig. 101

from the body of the trigger, with the sear plunger, using a screw-driver (fig. 102).

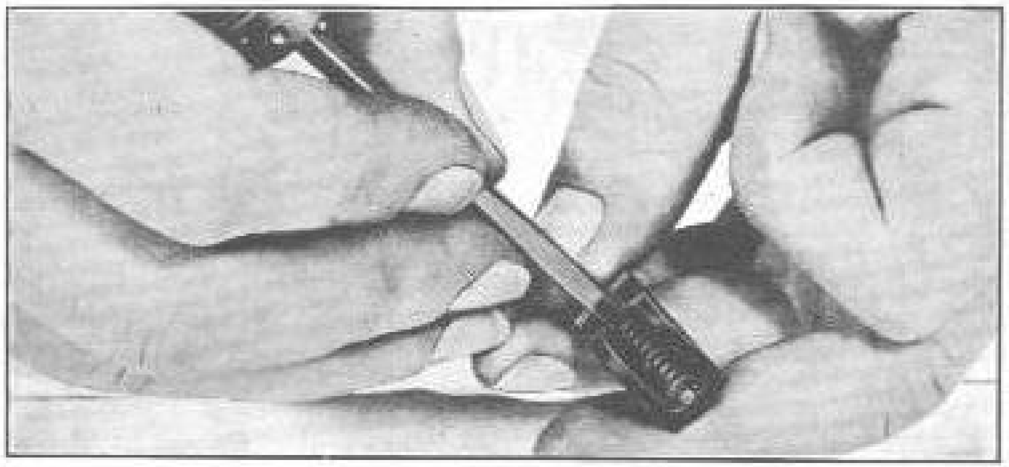


Fig. 102

e) **Pistol grip.** — Remove the cleaning kit from the pistol grip, — this is released by turning the spring detent (fig. 103).

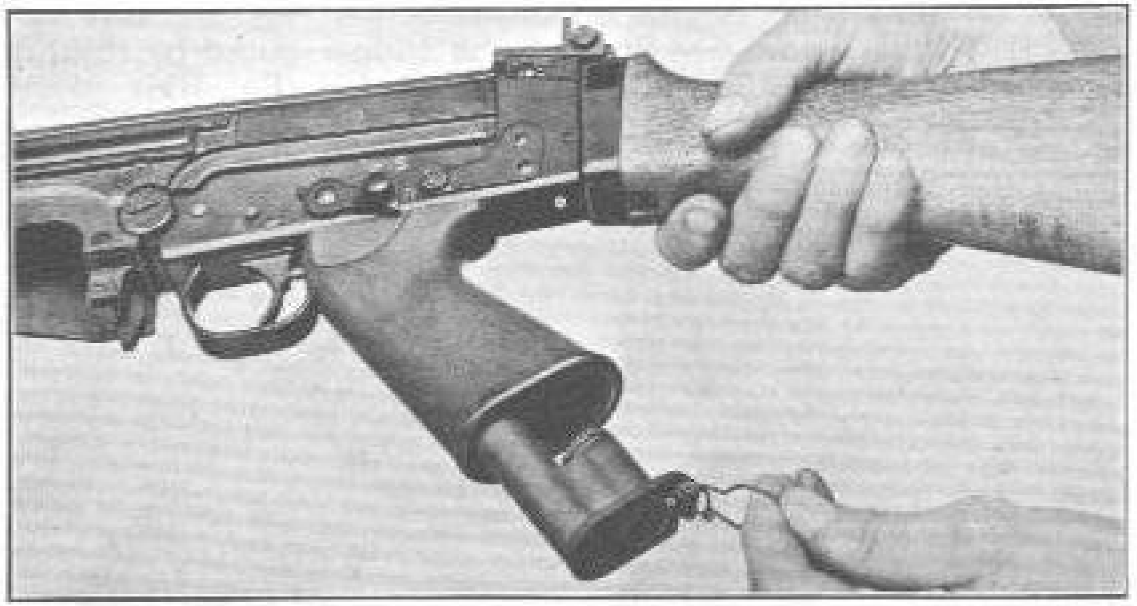


Fig. 103

Use a larger screwdriver to unscrew the pistol grip nut screw (fig. 104).

Remove the screw and pistol grip (fig. 105).

Fig. 104



Fig. 105

f) **Trigger guard.** — Remove the trigger guard by rotating it forward, while pulling it slightly downward (fig. 106).

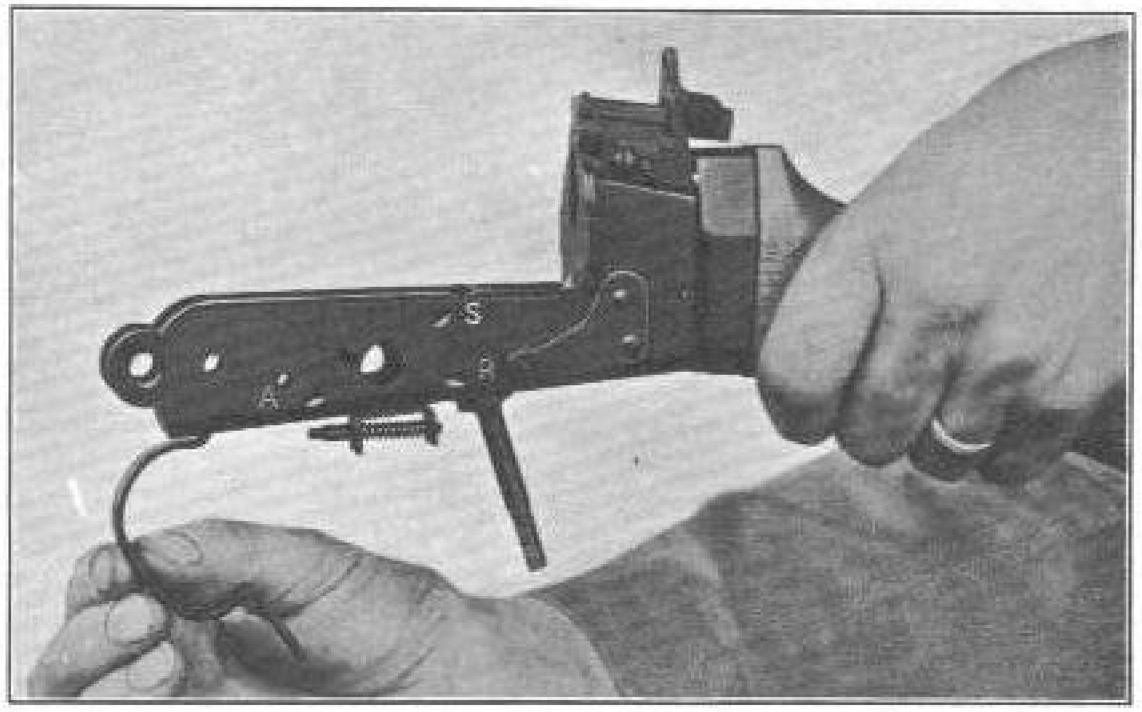


Fig. 106

g) **Trigger spring.** — With finger press the trigger plunger to the rear (this will compress the trigger spring) and rotate it downwards (fig. 107).

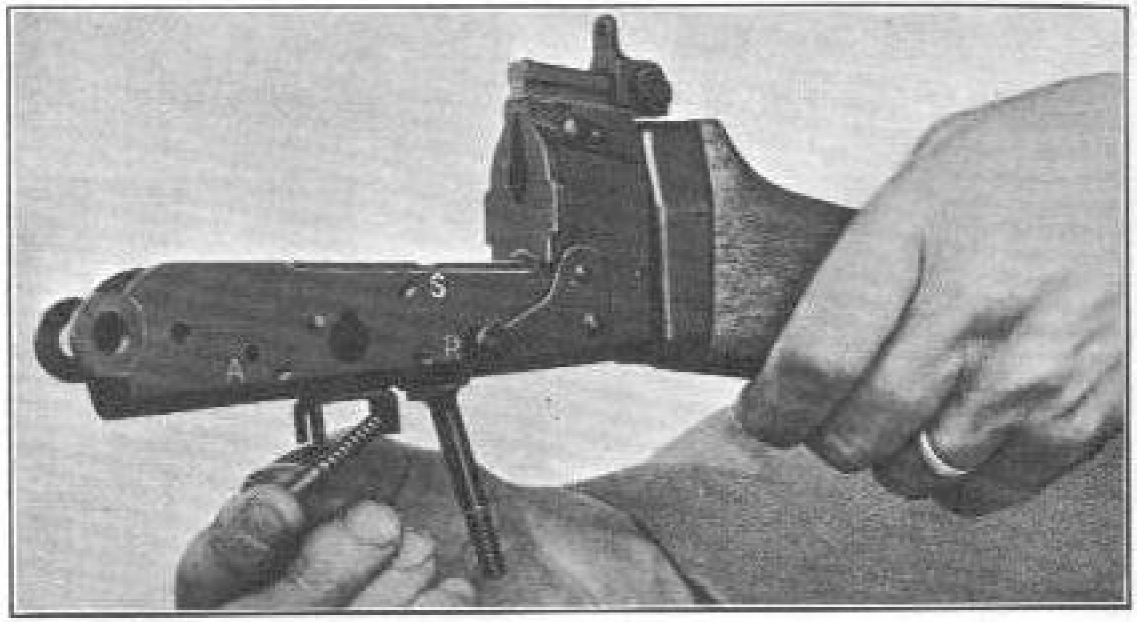


Fig. 107

This releases the trigger plunger and trigger spring (fig. 108).

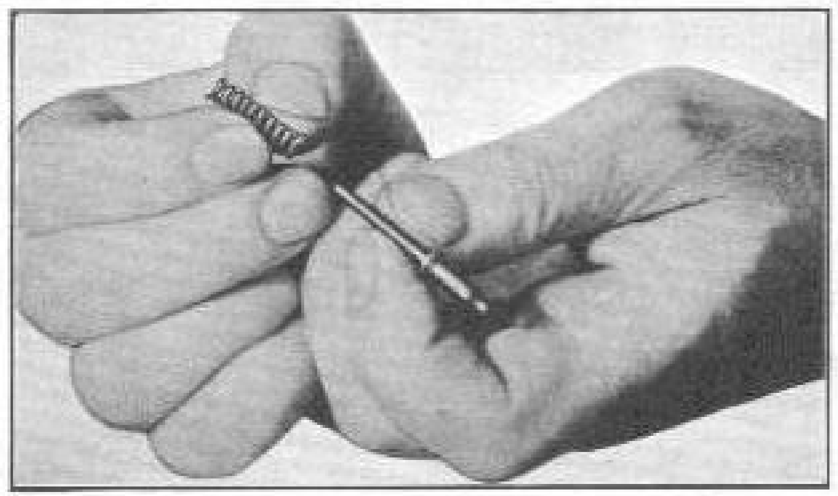


Fig. 108

14. REAR SLING SWIVEL AND BUTT PLATE

a) **Rear sling swivel.** — Unscrew both screws retaining the plate for rear sling swivel (fig. 109).

This releases the plate and the rear sling swivel (fig. 110).

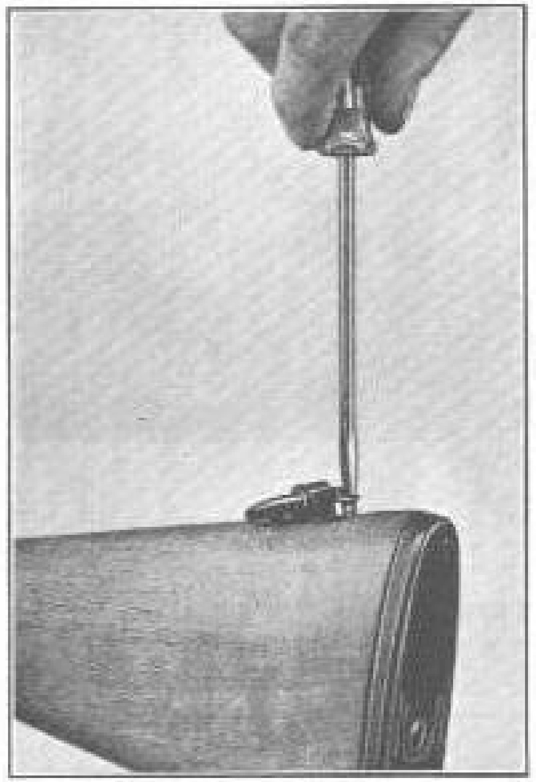


Fig. 109

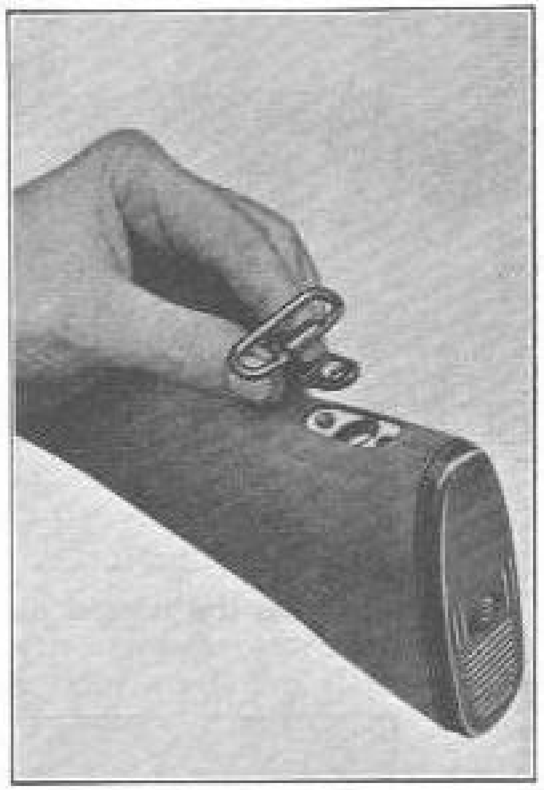


Fig. 110

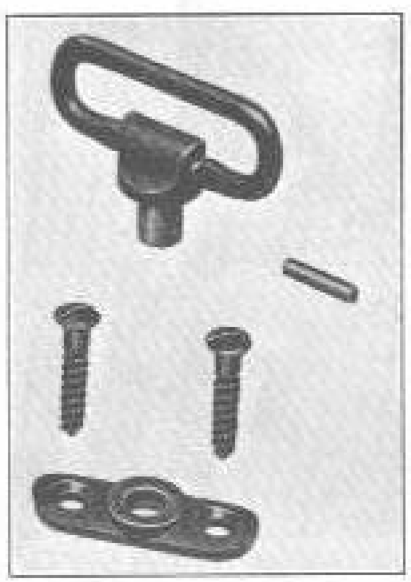


Fig. 111

Push out the retaining pin securing the sling swivel and separate the base of the swivel with the sling swivel (fig. 111).

b) **Butt plate.** — Unscrew butt plate screw (fig. 112).

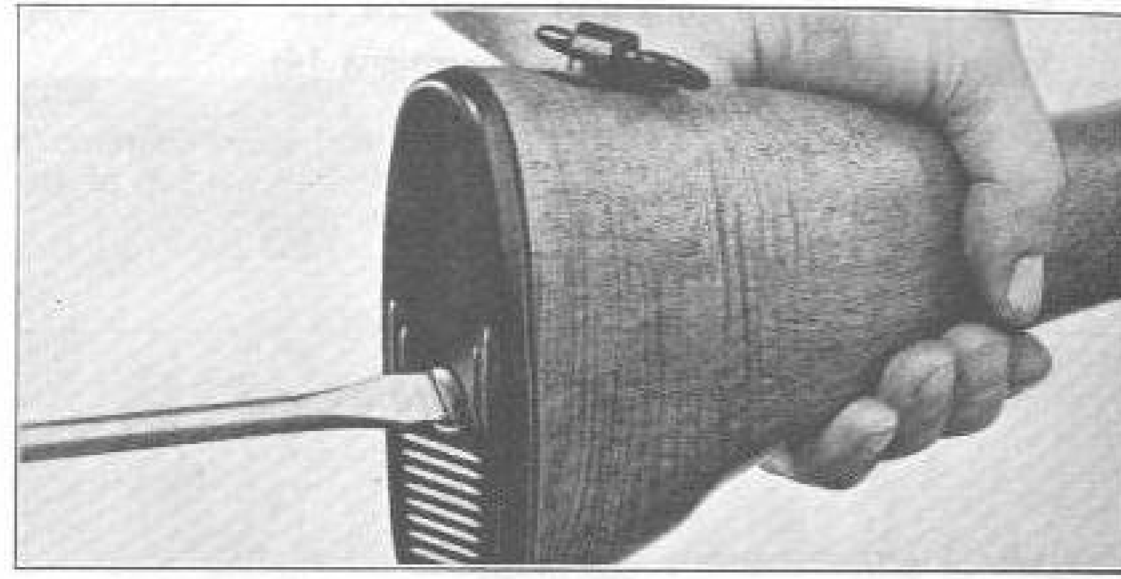


Fig. 112

Remove the butt plate (fig. 113) and the spread washer for the butt plate screw.

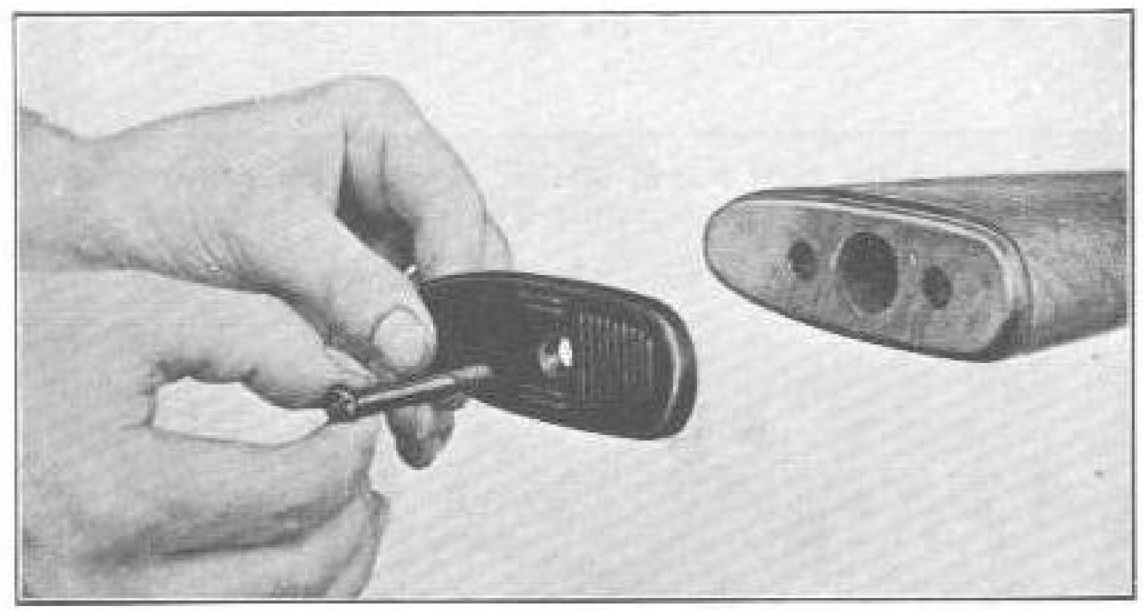


Fig. 113

15. RETURN SPRINGS AND BUTT STOCK

Field strip the rifle (group of operations 1).

Strip the butt plate (group of operations 14).

a) **Return springs.** — Using the special tool provided, remove the butt screw; hold the tool firmly to control the action of the springs (fig. 114).

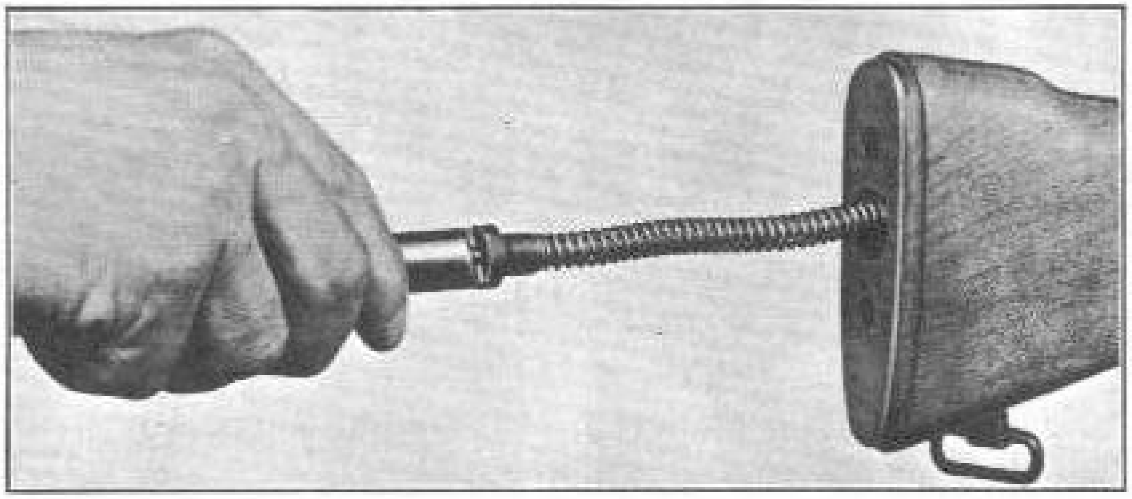


Fig. 114

Separate the butt screw, washer, plunger for return springs and return springs (inner and outer) (fig. 115).

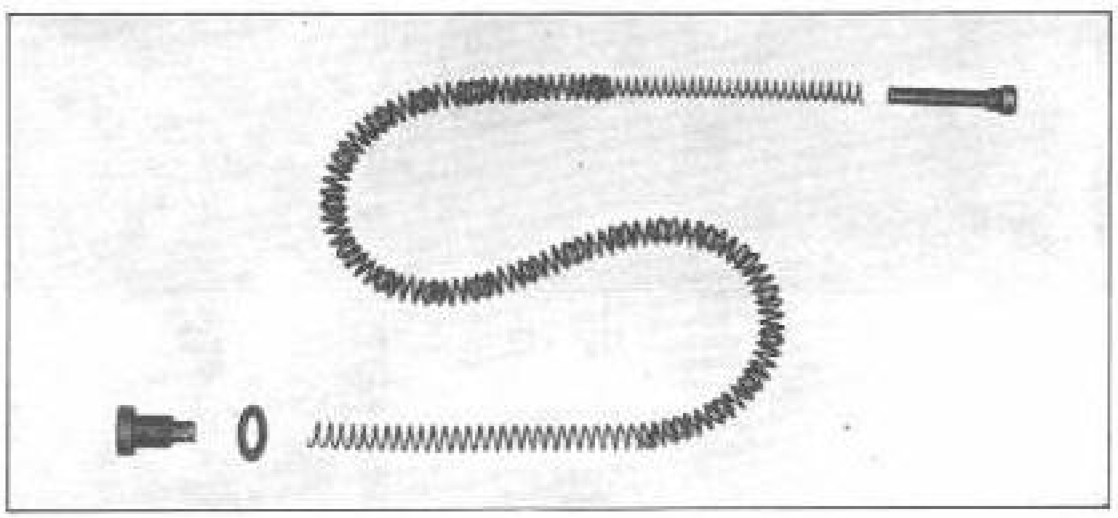


Fig. 115

b) **Butt stock.** — To remove the butt stock from the trigger frame, unscrew the butt support screw (fig. 116) and separate the butt stock from the frame trigger housing (fig. 117).



Fig. 116

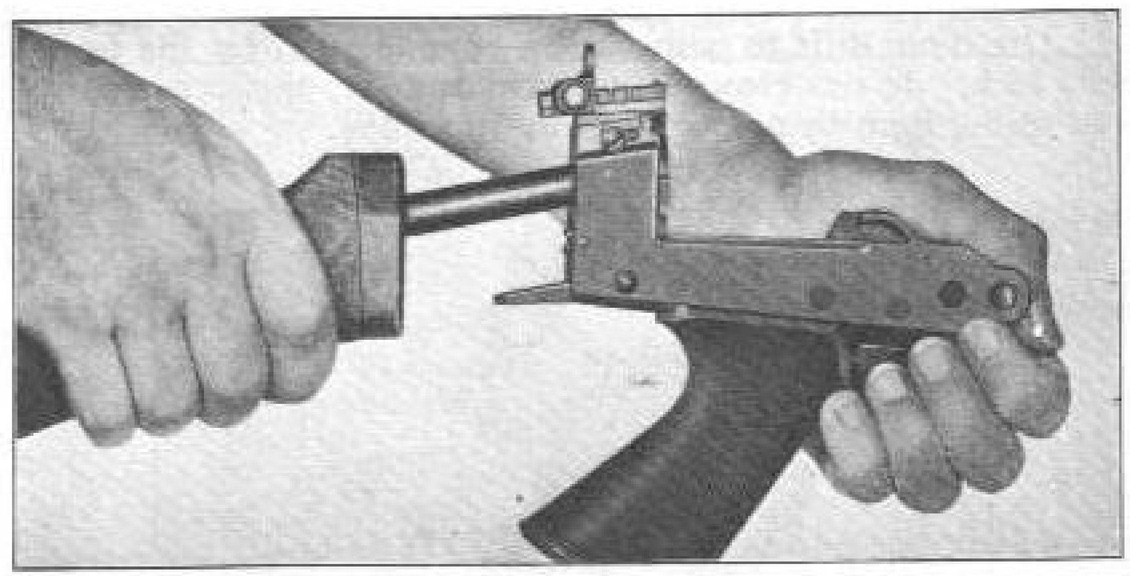


Fig. 117

The front socket of the butt stock is not removable.

16. TRIGGER FRAME-BODY LOCK MECHANISM

Field strip the rifle (group of operations 1).

Strip the joint pin frame-body (group of operations 8).

Strip the butt plate (group of operations 14).

Strip the return springs and butt stock (group of operations 15).

Unscrew the lock retaining screw (fig. 118).

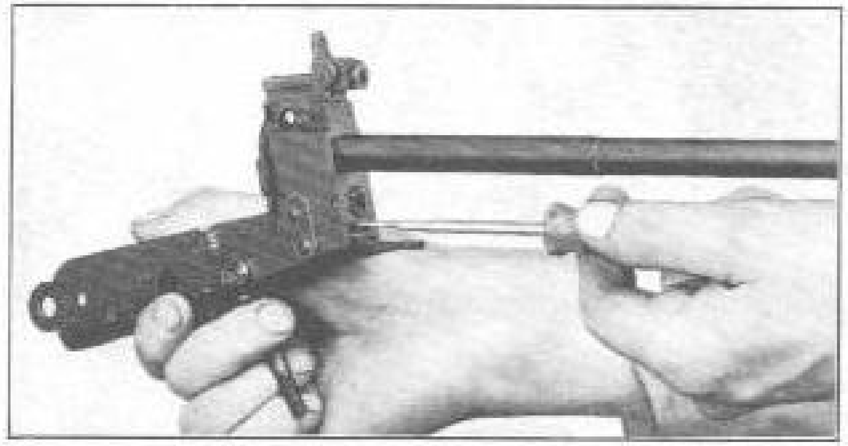


Fig. 118

Use a pin drift to push out the retaining pin for the frame-body lock; do not remove the drift at once, this prevents the lock spring from flying out violently (fig. 119).

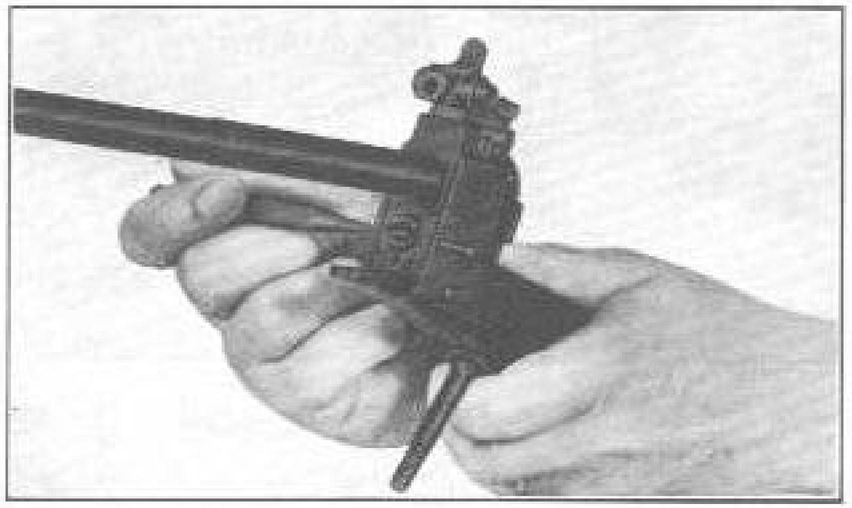


Fig. 119

Hold back the spring with thumb or index finger, then remove the drift (fig. 120).

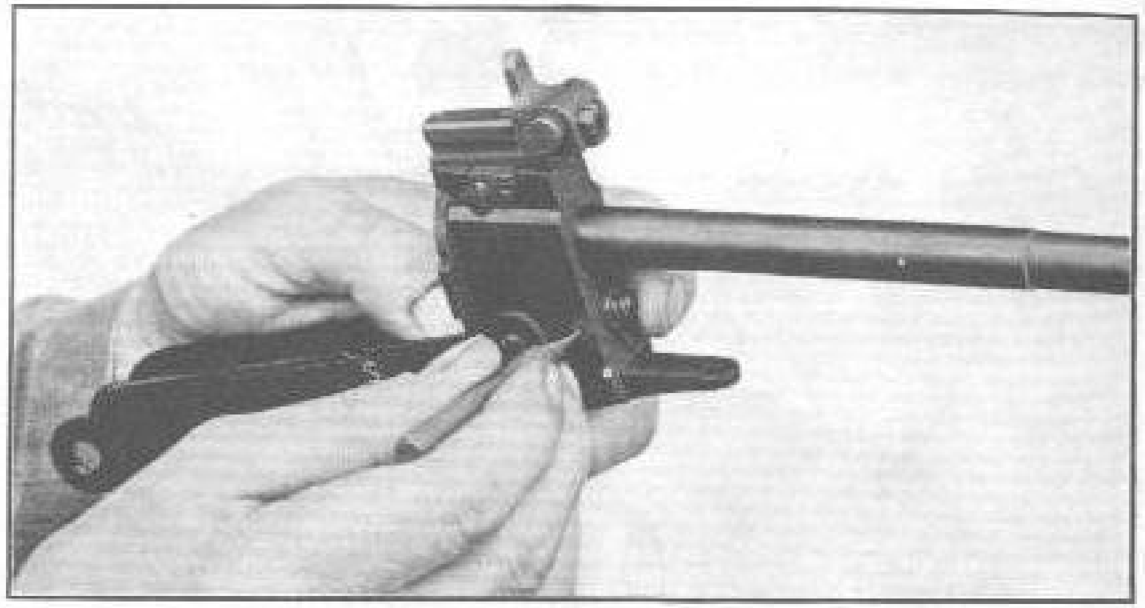


Fig. 120

Remove the spring and the spring plunger (fig. 121).

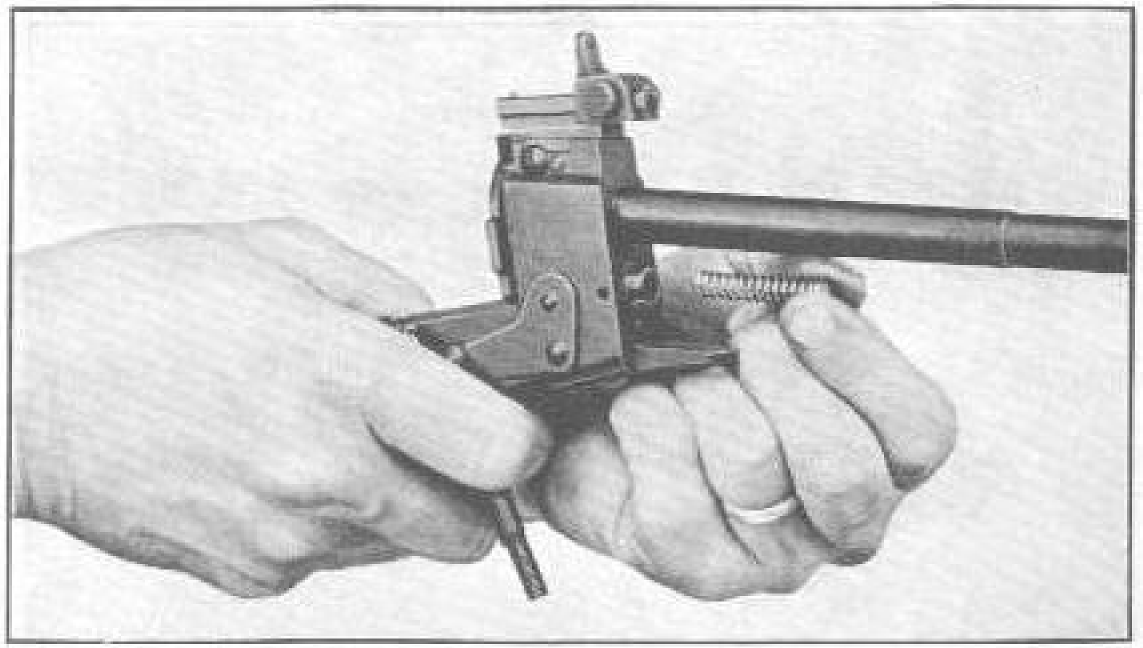


Fig. 121

Exert pressure with finger on end of locking lever axis (right side of trigger frame) and remove locking lever towards the left of frame (fig. 122).

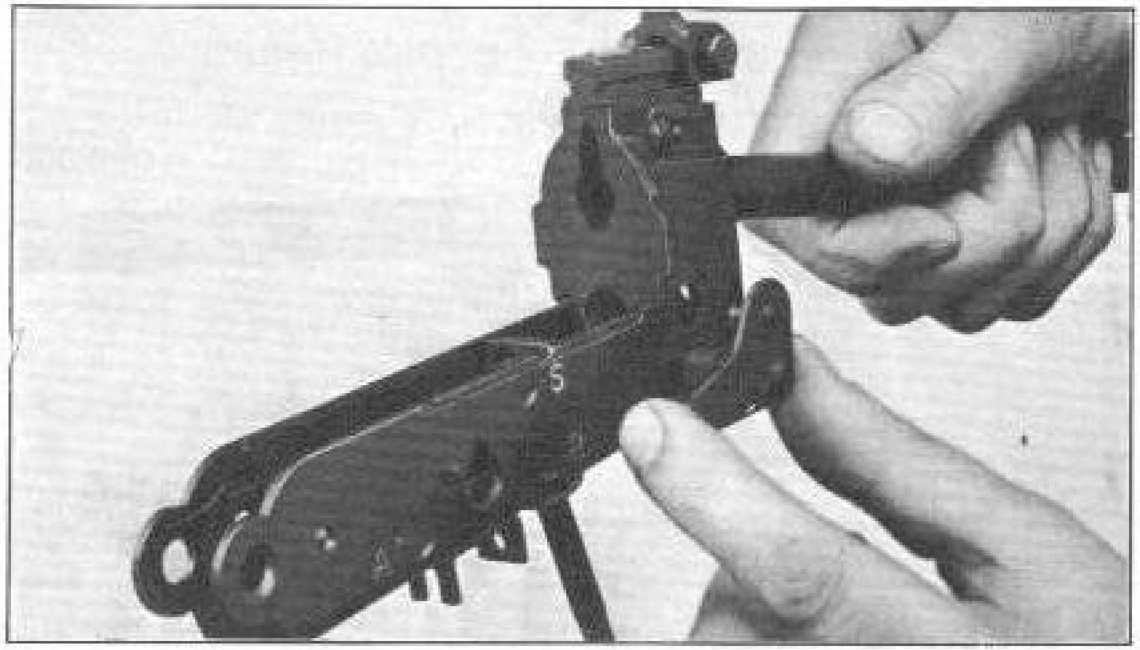


Fig. 122

Remove the lock from its housing (fig. 123).

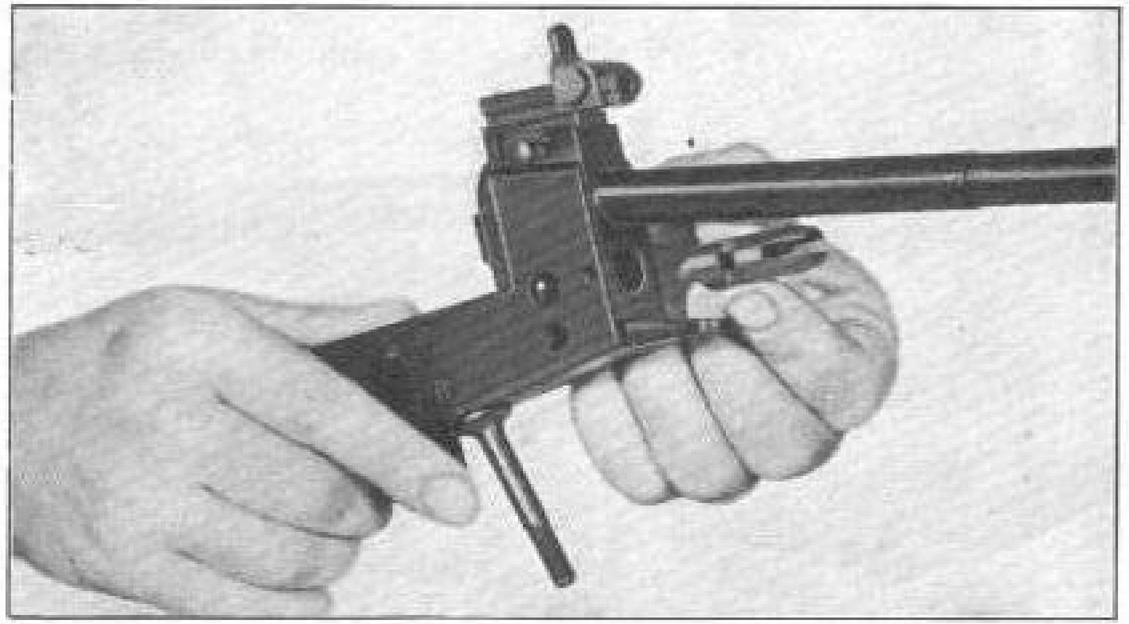


Fig. 123

17. BACKSIGHT

Unscrew one of the backsight support adjusting screws (fig. 124).

N. B. — It is not advisable to touch the second screw; this serves as a stop and helps in locating the backsight support correctly when assembling.



Fig. 124

Slide the backsight support to the side on which the screw has been removed (fig. 125).

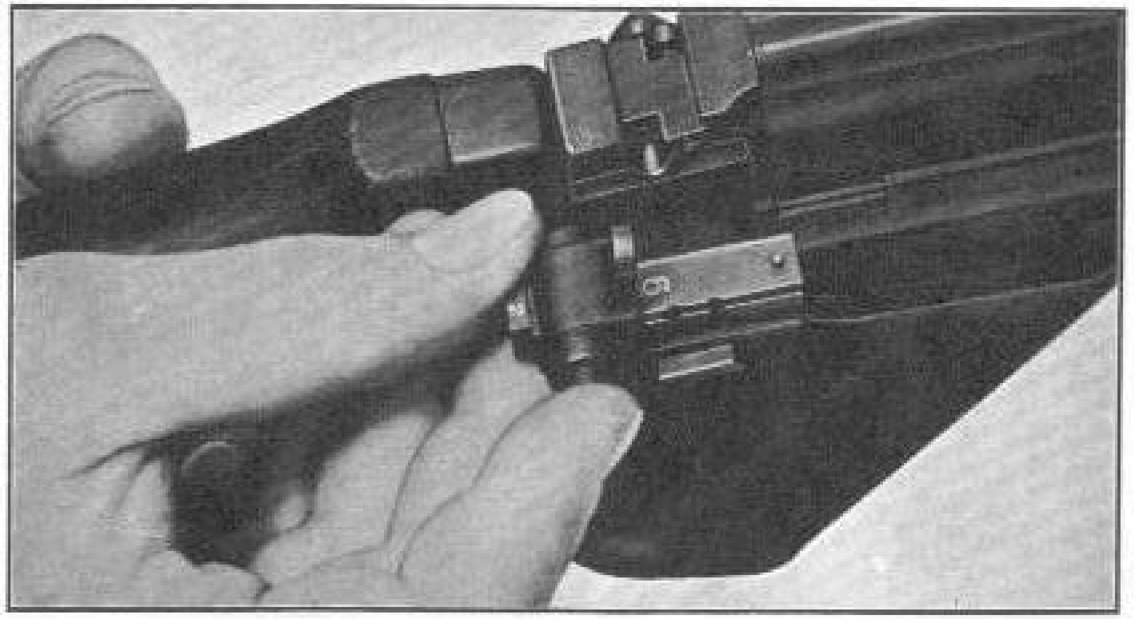


Fig. 125

Press on the backsight catch and withdraw this forward (fig. 126), after removing the backsight stop pin.

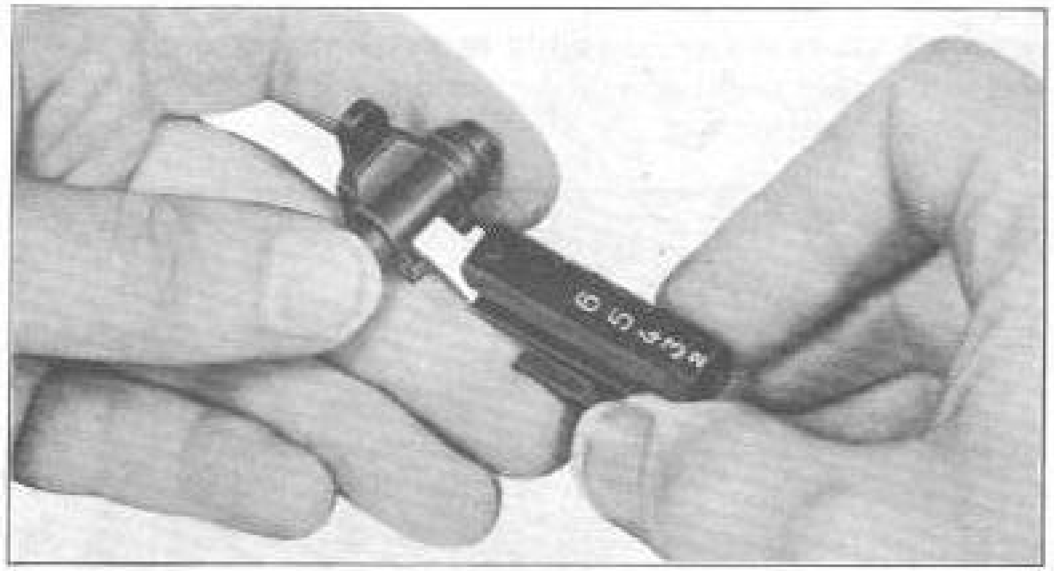


Fig. 126

This frees the backsight catch and its spring, as well as the spring stop for adjusting screws (fig. 127).

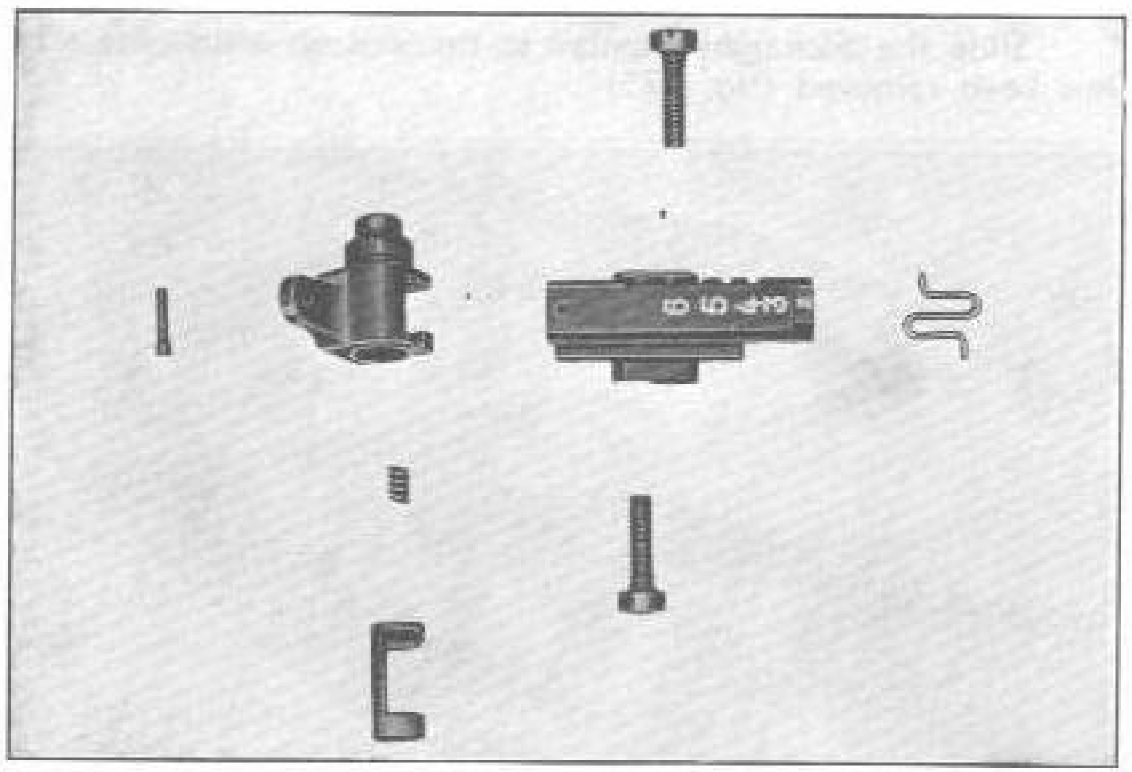


Fig. 127

18. MAGAZINE

Use the nose of a cartridge, to disengage the bottom plate (fig. 128). Then knock the magazine against a piece of wood, as illustrated, until the bottom plate comes out about half an inch (fig. 129).



Fig. 128

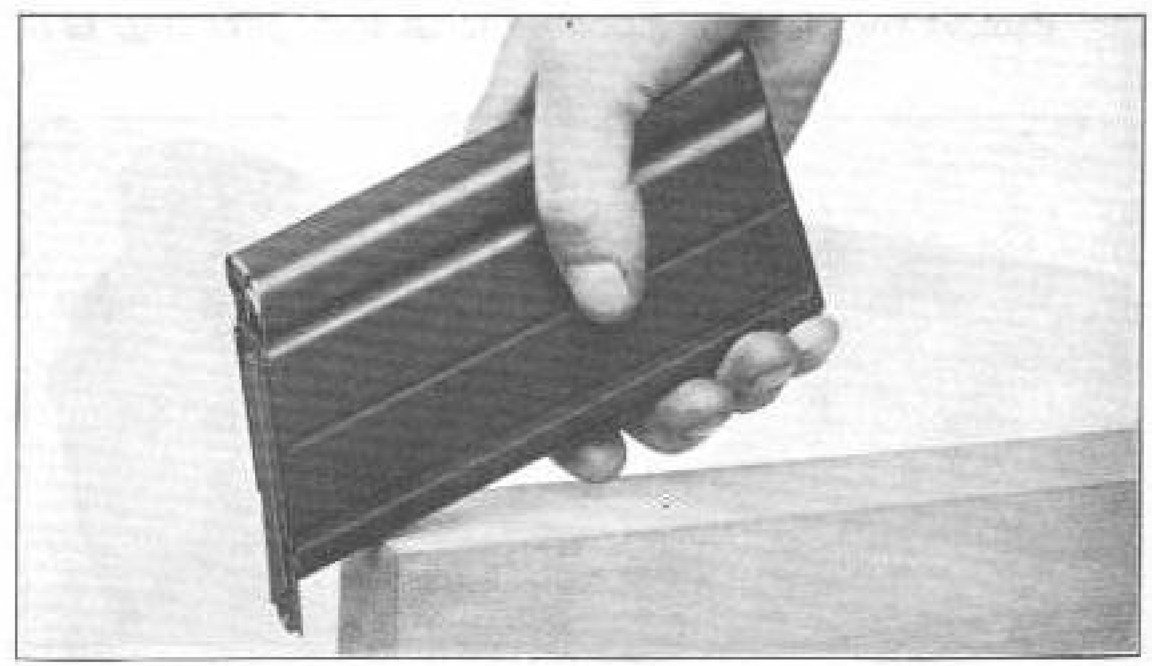


Fig. 129

Remove the magazine bottom plate, taking care to hold the spring down with the thumb (fig. 130).

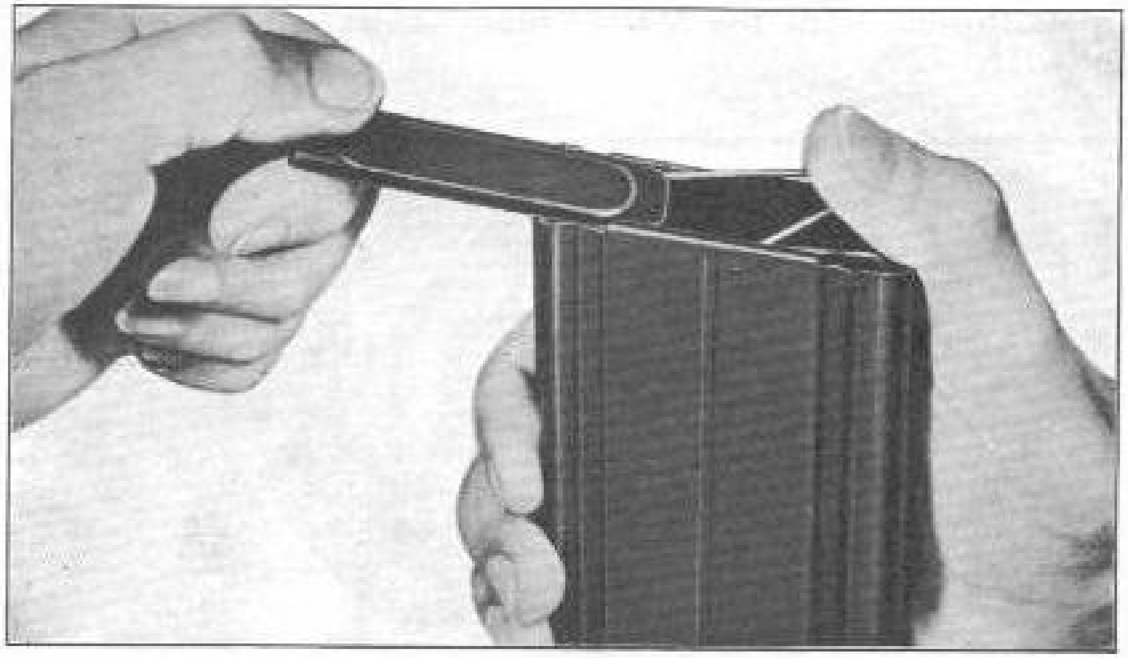


Fig. 130

Remove the platform spring up to its last spiral (fig. 131).

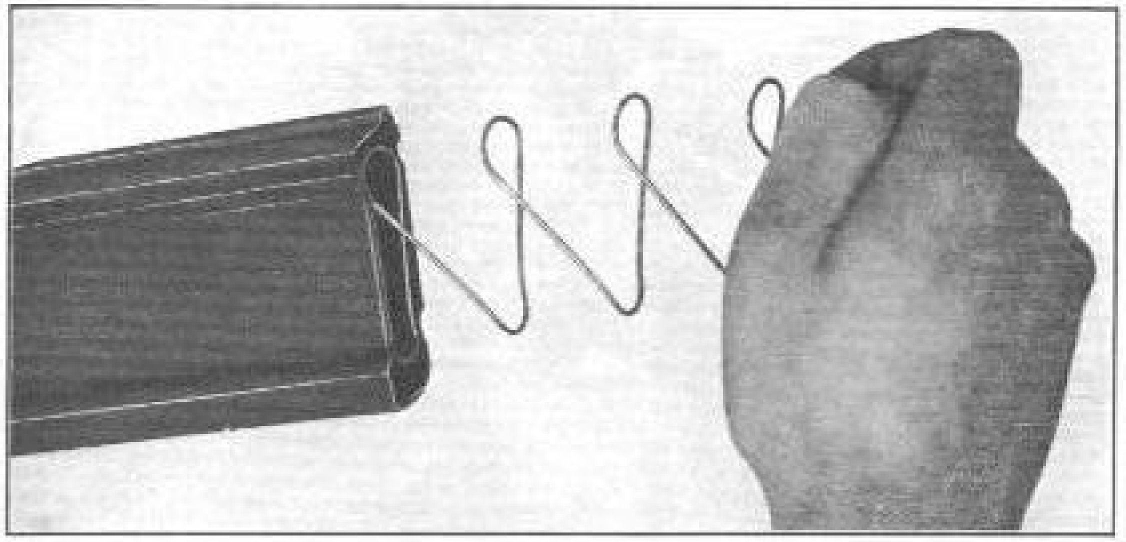


Fig. 131

Acting on the spring, turn the magazine platform approx. 45° inside the magazine, then extract the platform (fig. 132). Disengage the spring from the two rear and one front retaining lugs.

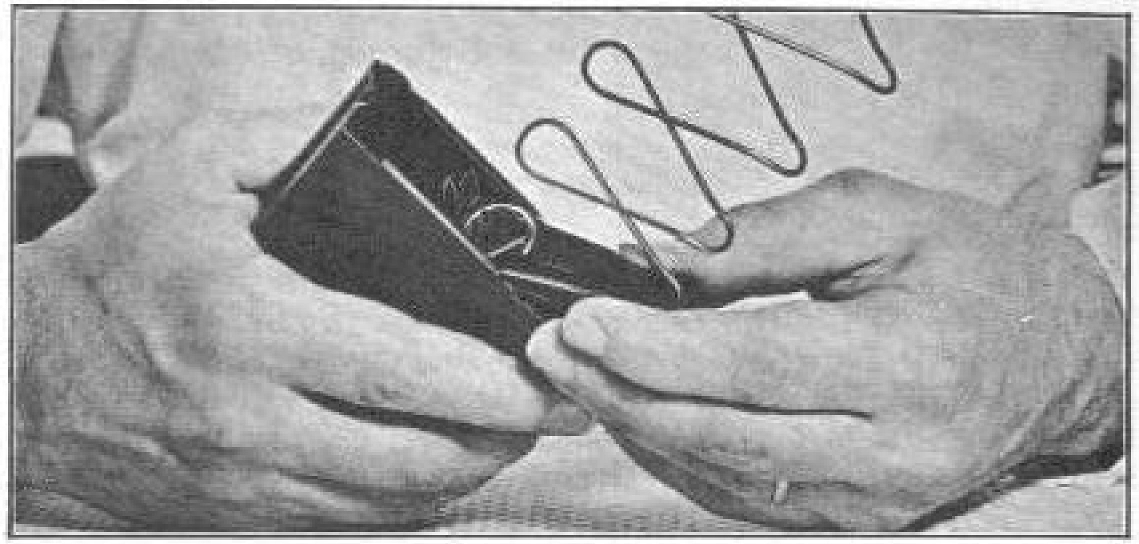


Fig. 132

B. ASSEMBLY

The component parts of the rifle are assembled in the opposite order to that of stripping; this is the reason for laying out the parts in the order of stripping.

To help in assembly, reference should be made to the illustrations showing how to strip for each group of operations, as required.

1. MAGAZINE

Replace the platform spring in front of the front retaining lug and behind the two rear retaining lugs (fig. 133). Replace the magazine platform in the magazine and exert pressure to push it well in (fig. 134). Acting on the spring, get the platform correctly positioned. Compress the spring and replace the bottom plate of the magazine (fig. 130).

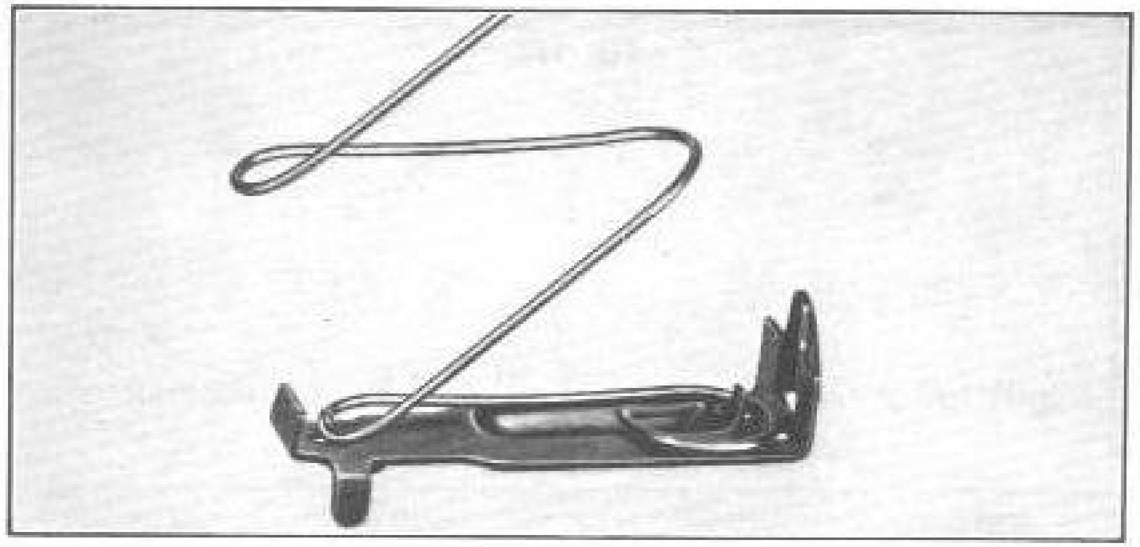


Fig. 133

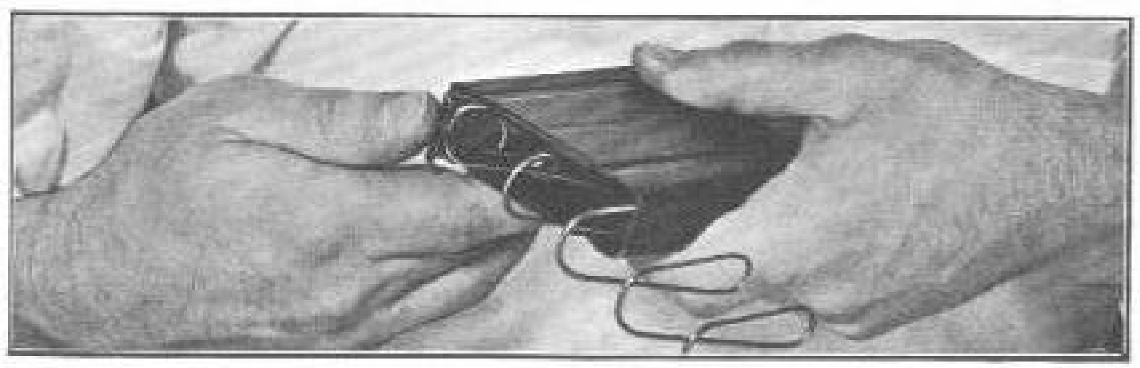


Fig. 134

2. BACKSIGHT

Replace the backsight catch spring in its housing on the backsight, replace the catch on the backsight and the backsight on the support.

Replace the spring stop for adjusting screws, as shown in figure 135.

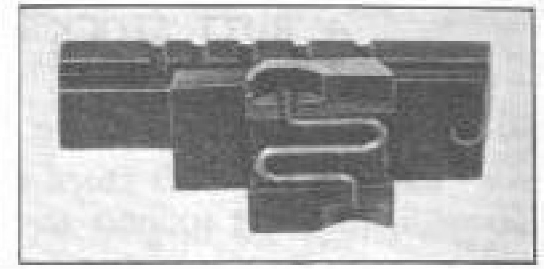


Fig. 135

Replace the backsight stop pin in the support and replace the assembled backsight on the trigger frame so that it comes up against the adjusting screw, which has not been removed.

Screw up the second adjusting screw and tighten correctly (fig. 124).

3. TRIGGER FRAME-BODY LOCK MECHANISM

- — Replace the frame-body lock, see fig. 123.
- — Replace the lever (fig. 122) and move it until the operating pin is correctly engaged in the lock.
- — Replace the spring and spring plunger (fig. 121).
- — Compress the spring and insert a pin drift in the housing for the retaining pin (fig. 136).

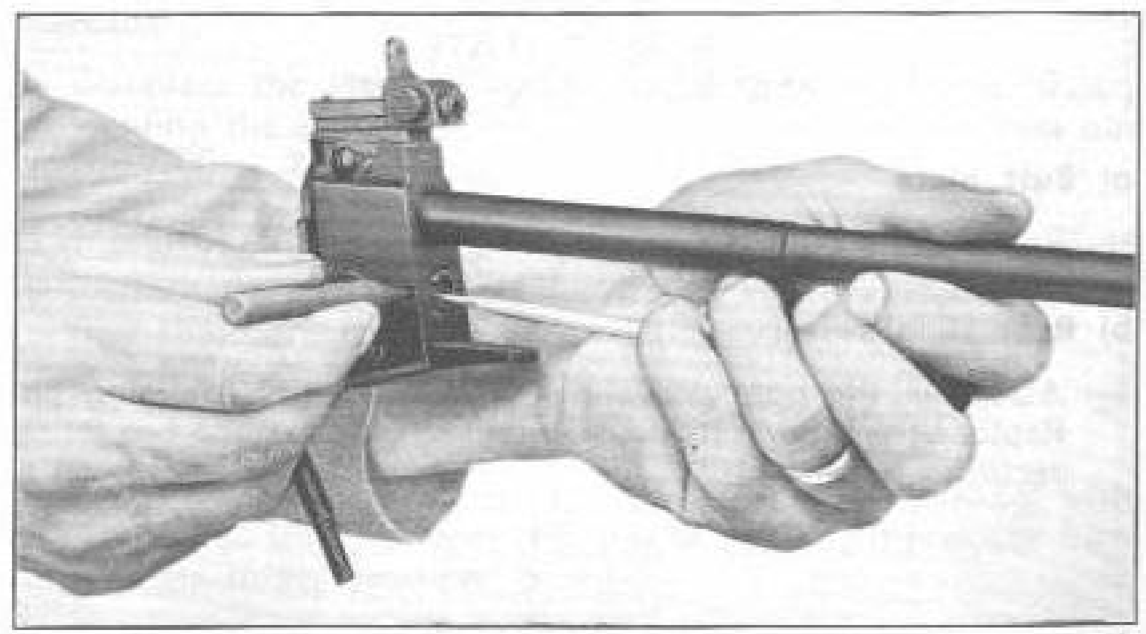


Fig. 136

— Insert the pin and withdraw the drift little by little until the pin is pushed fully home.
Screw in the lock lever retainer screw (fig. 118).

4. BUTT STOCK AND RETURN SPRINGS

a) **Butt stock**

Replace the butt stock on the trigger frame (fig. 117) and screw in the butt support screw (fig. 116).

b) **Return springs**

— Replace the inner spring within the outer spring.

— Replace the spring plunger on the front end of the inner spring; this is held in position on the spring, of which the final coil is tighter.

— Insert the springs (plunger head forward) in the return spring tube.

— Get the butt screw and its washer ready on the special tool provided.

— Insert the stem of the tool in the return springs and compress (fig. 114).

— Screw in tightly.

5. BUTT PLATE AND REAR SLING SWIVEL

a) **Butt plate**

— Replace the butt plate and screw home (fig. 113 and 112).

b) **Rear sling swivel**

— Assemble the base and sling swivel with the retaining pin. Replace the base in its housing and screw down the two screws securing it (fig. 110).

6. PISTOL GRIP AND TRIGGER MECHANISM

a) **Pistol grip**

— Replace the plunger in the trigger spring (fig. 108).

— Replace the spring and plunger as shown in figure 107. Compress the trigger spring with finger and swing it upwards.

— Replace the trigger guard in its housing in the frame trigger housing and swing to the rear (fig. 106).

— Replace the pistol grip and nut screw and tighten screw (fig. 104 and 105).

— Replace the cleaning kit in the pistol grip and secure by inserting the spring detent in its groove in the pistol grip (fig. 103).

b) **Trigger mechanism**

— Replace the sear spring in its housing in the trigger, with the plunger directed forward.

— Replace the trigger (fig. 101); make sure that the trigger plunger is correctly positioned in its notch.

— Position the sear so that the sear plunger fits correctly in its housing.

— Compress the sear spring between thumb and index finger, locating the sear, then replace the trigger and sear axis pin (fig. 100).

— Replace the hammer and its axis pin (fig. 97).

— Replace the locking plate for the axis pins and make sure that these are correctly secured (fig. 95).

— Replace the index stud and its spring (fig. 90) in the change lever and insert pin.

— Replace the change lever in the frame trigger housing, with the change lever upwards (fig. 88), with a slight pressure turn it to its safety position "S".

— Replace the hammer spring and its housing on the hammer spring rod.

— Replace the hammer spring rod head in its housing (fig. 93).

— Use thumb to compress the hammer spring, pushing it forwards and backwards to locate its housing correctly (fig. 137).

— Cock the hammer.



Fig. 137

7. LOCKING SHOULDER

Insert the locking shoulder by hand (fig. 87); push it home as far as possible, then carefully hammer it into position.

8. HOLDING OPEN DEVICE AND MAGAZINE CATCH

— Replace the holding open device in its housing (fig. 85).

— Replace the magazine catch; take care to get the spring into its notch in the body; use a screwdriver for this operation (fig. 84 and 83).

— Replace the magazine catch axis pin and screw in (fig. 82 and 81).

9. COCKING HANDLE

— Insert the cocking handle detent and its spring (fig. 80) in their housing.

— Compress these and insert the retaining pin.

— Replace the cocking handle slide on the weapon from the rear (fig. 77); press it lightly against the weapon and push forward.

— Insert the cocking handle lug (fig. 75) and push fully home.

— Replace the pin.

10. SAFETY SEAR

Insert the safety sear as shown in figure 73; push it into its housing, making it turn slightly upward, and position it so that the holes for the frame-receiver joint pin coincide.

11. JOINT PIN, TRIGGER FRAME-BODY

— Insert the trigger frame in its housing in the receiver (fig. 72); make sure that the safety sear is in the right position.

— Insert the joint pin from the right side of the weapon (fig. 71).

N. B. — If the seating of the safety sear is not in alignment, use the nose of a cartridge to centre it correcly.

— Insert the retainer pin from the left side of the rifle (fig. 69) and screw firmly, while the rifle is still open (fig. 68).

12. FORESIGHT

— Replace the foresight spring (fig. 67) in its housing in the gas block.

— Place the fixing plate over the spring, with the lugs of the plate directed upward (fig. 67).

— Screw in the foresight completely (fig. 66 and 65) and make sure that the clamps of the spring plate come down correctly in the ribs of the gas block.

— Unscrew the number of clicks required, as noted when stripping.

13. FRONT SLING SWIVEL

— Replace the sling swivel band (fig. 64) and tighten.

— Replace the front sling swivel and its screw (fig. 63 and 62).

14. GAS CYLINDER AND GAS REGULATOR SLEEVE

a) **Gas cylinder**

— Replace the gas tube nut and gas regulator sleeve on the gas cylinder.

— Screw the cylinder to the gas block (fig. 60) and then unscrew slightly so that the two gas ports in the cylinder are directed downwards.

— Replace the gas tube retaining pin and push fully home.

— Use the special spanner (fig. 58) to tighten the gas tube nut and clamp it correctly.

b) **Gas regulator sleeve**

N. B. — The gas regulator sleeve will already be over the gas cylinder, as it has to be replaced before the cylinder is screwed to the gas block.

— Replace the gas regulator sleeve spring; use a screwdriver to push the ends of the spring into their housing in the gas block (fig. 138).

— Screw the gas regulator sleeve fully home after passing it over the sleeve spring (fig. 55).

— Unscrew to obtain the original setting.

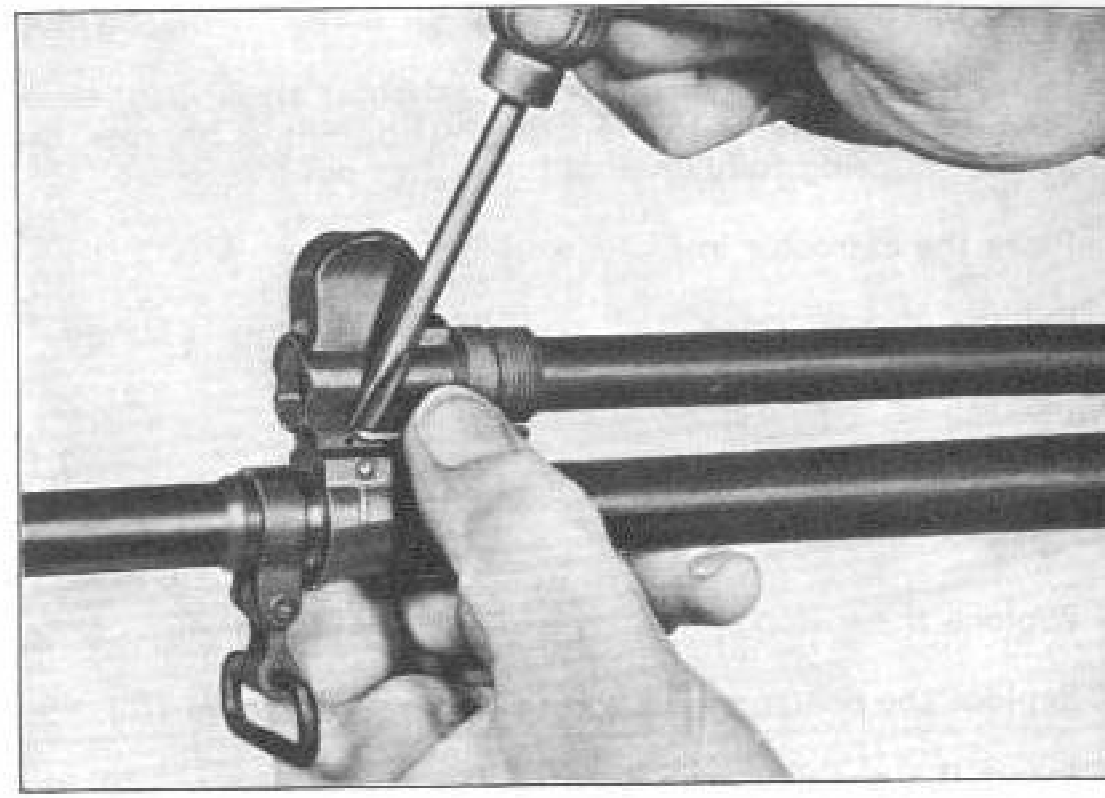


Fig. 138

15. CARRYING HANDLE

— Replace one of the two bands on the handle axis and push it into the second axis groove.

— Then replace a washer, the handle and the other washer.

— Replace the second band and push into the first axis groove (fig. 54).

— Replace the carrying handle assembly in its housing on the body (fig. 53).

— Tighten the nut securing the gas tube and carrying handle.

16. HANDGUARD

— Replace both handguard sections, first fixing them in their socket (fig. 51) and then bringing them in against the barrel.

— Screw in position and tighten the handguard screw (fig.50).

17. EXTRACTOR

— Put the extractor spring and buffer back into its housing in the plunger.

— Place this assembly in its housing in the breech block (fig. 49).

— Using the nose of a cartridge, or preferably the special stripping and assembly tool provided (fig. 48), compress the extractor spring fully and hold it in this position.

— Place the extractor in its housing in the breech block.

— Let the plunger come back under the action of its spring.

18. ASSEMBLY AFTER FIELD STRIPPING

— Replace the piston spring on the piston rod (fig. 46).

— Replace the piston and its spring in the gas cylinder (fig. 45).

— Insert the gas plug, compressing the piston spring, with the big end of the plunger turned towards the barrel (fig. 44).

— When the gas plug is fully home, rotate it one-eighth of a turn, so that the letter "A" moves upwards.

— Use the nose of a cartridge to push the plunger and rotate so that the letter "A" appears uppermost (fig. 42).

— Replace the firing pin spring and the firing pin in the breech block (fig. 41); compress the spring by working the firing pin and replace the pin.

— Replace the breech block in the slide, inserting the rear part obliquely in the slide (fig. 139).
Exert pressure on the breech block so that the firing pin spring is slightly compressed and the breech block is swung downwards into its correct position in the slide.

— Insert the ribs of the cover in the corresponding grooves in the body (fig. 38) and slide the cover fully forward.

— Replace the mechanism in the body, inserting the ribs of the slide in the corresponding grooves in the body. When this is done, the breech block should be in its forward position (fig. 140) and the muzzle of the rifle pointing downwards; the mechanism will then fall into position correctly.

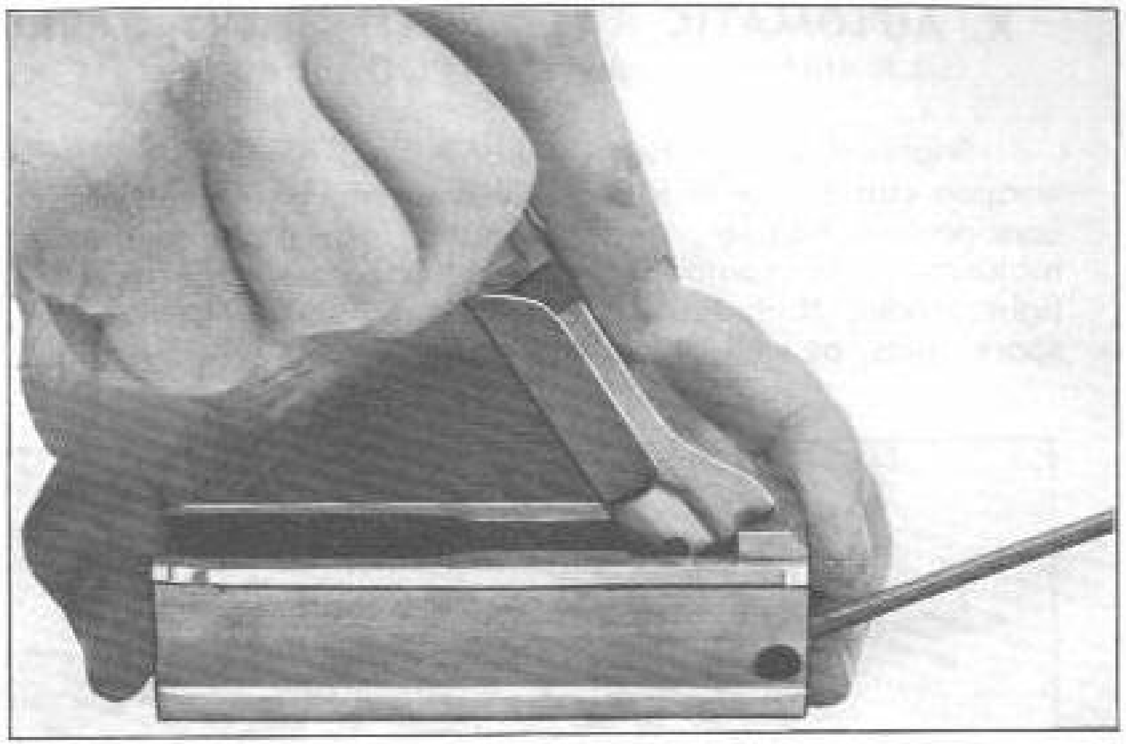


Fig. 139

— Close the rifle, still holding the muzzle downwards, to prevent any possibility of the slide rod protruding.



Fig. 140

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